

# AMERICAN NURSERYMAN

*The Nurseryman's Forte: To Make America More Beautiful and Fruitful*

MARCH 15, 1945



*Forsythia Intermedia Spectabilis*

## SEEDS

TREE—SHRUB—PERENNIAL  
FLOWER—VEGETABLE

HERBST BROTHERS  
92 Warren St., New York 7, N. Y.

Correspondence with seed collectors and growers invited.

Free catalog "Seeds for Nurserymen."

# EVERGREENS — B&B

These Evergreens are growing here at Shenandoah. All have been three times, XXX, transplanted, spaced out for proper development and properly pruned and sheared to insure compact symmetrical specimens.

All Evergreens are in the field. Shipments will be made in April. Orders will be dug and shipped in the order received. Mail your order today.

## JUNIPERS

**CHINENSIS PITZERIANA**, Pfitzer, 5 to 6 ft.  
Handsome gray-green foliage. A valuable, hardy variety succeeding almost everywhere.

	Per 10	Per 100
480 15 to 18 ins. ....	\$15.50	\$140.00
1200 18 to 24 ins. ....	19.00	175.00
1600 2 to 2½ ft. ....	25.00	225.00
400 2½ to 3 ft. ....	30.00	275.00
300 3 to 3½ ft. ....	35.00	325.00
300 3½ to 4 ft. ....	38.50	360.00
280 4 to 5 ft. ....	45.00	425.00
110 5 to 6 ft. ....	55.00	500.00
120 18 to 24 ins. staked		
upright, heavy	28.00	250.00
150 2 to 2½ ft. staked		
upright, heavy	33.00	300.00
60 3½ to 4 ft. staked		
upright, heavy	47.50	450.00

**COMMUNIS ASHFORDI**, Ashford, 10 ft.  
Of open loose growth, branched at ground line. Short needles of silvery, grayish-green, deepening into purple shades during winter.

200 12 x 12 ins. ....	\$11.00	\$100.00
120 15 x 15 ins. ....	14.00	125.00
180 18 x 18 ins. ....	17.50	160.00
100 24 x 24 ins. ....	22.50	200.00

**COMMUNIS DEPRESSA PLUMOSA**, Andorra, 2 ft.  
A low growing, spreading, dwarf Evergreen. Beautiful silvery-green in spring turning to rich purple-bronze in autumn.

150 15 to 18 ins. ....	\$12.50	
480 18 to 24 ins. ....	16.50	\$150.00
400 2 to 2½ ft. ....	20.00	185.00
300 2½ to 3 ft. ....	25.00	225.00
150 3 to 3½ ft. ....	27.50	250.00
100 3½ to 4 ft. ....	33.00	300.00

**COMMUNIS HIBERNICA**, Irish, 7 to 8 ft.  
Foliage glaucous-green. An old, well known, popular variety.

1600 18 to 24 ins. ....	\$10.00	\$ 90.00
1580 2 to 3 ft. ....	14.00	125.00
800 3 to 4 ft. ....	17.50	160.00
200 4 to 5 ft. ....	22.50	200.00

**SABINA**, Savin, 3 to 5 ft.  
Spreading form with slender branches and dark green leaves. Excellent for foundation work and for underplanting.

220 15 to 18 ins. ....	\$15.00	\$135.00
1100 18 to 24 ins. ....	17.50	160.00
800 2 to 2½ ft. ....	22.00	200.00
350 2½ to 3 ft. ....	27.00	235.00
200 3 to 3½ ft. ....	30.00	275.00
100 3½ to 4 ft. ....	33.00	300.00

**SCOPULORUM**, Colorado Silver, 25 to 30 ft.

Silvery foliage and close, symmetrical, upright growth. Thrives in hot, dry weather when the color is brightest. Very hardy.

400 18 to 24 ins. ....	\$15.50	\$140.00
600 2 to 2½ ft. ....	18.00	165.00
800 2½ to 3 ft. ....	22.00	200.00
280 3 to 3½ ft. ....	27.50	240.00
400 3½ to 4 ft. ....	30.00	275.00
190 4 to 4½ ft. ....	37.50	325.00
200 4½ to 5 ft. ....	40.00	375.00
160 5 to 6 ft. ....	46.00	435.00
50 6 to 8 ft. ....	55.00	
220 12 x 12 ins. ....		
Globe Sheared	13.00	135.00
220 15 x 15 ins. ....		
Globe Sheared	18.00	165.00
80 18 x 18 ins. ....		
Globe Sheared	22.00	200.00

**SCOPULORUM**, Chandler's Silver, 20 to 30 ft.

Improved variety of Scopulorum. Compact grower with good color.

	Per 10	Per 100
80 2½ to 3 ft. ....	\$27.50	\$250.00
150 3 to 3½ ft. ....	32.50	300.00
60 3½ to 4 ft. ....	37.50	350.00
60 4 to 4½ ft. ....	42.50	

**SCOPULORUM PATHFINDER**, 20 to 25 ft.

A bluish-silver type of Scopulorum with very pyramidal habit of growth and with Arborvitae-like, flat foliage.

280 2½ to 3 ft. ....	\$27.50	\$250.00
150 3 to 3½ ft. ....	32.50	300.00
100 3½ to 4 ft. ....	37.50	350.00
20 4 to 4½ ft. ....	42.50	
30 4½ to 5 ft. ....	47.50	
10 5 to 6 ft. ....	55.00	

**SCOPULORUM SILVER BEAUTY**, 20 to 30 ft.

Pyramidal habit of growth, full at base, with greenish-silver foliage, more silver on tips of branches.

40 2½ to 3 ft. ....	\$27.50	
50 3 to 3½ ft. ....	32.50	\$300.00
10 3½ to 4 ft. ....	37.50	
30 4 to 4½ ft. ....	42.50	
10 4½ to 5 ft. ....	47.50	

**SCOPULORUM WELCH**, 20 to 30 ft.

Grafted, columnar-type. Scopulorum with greenish-silver foliage. Pyramidal habit retained without shearing.

60 3 to 3½ ft. ....	\$32.50	
80 3½ to 4 ft. ....	37.50	
40 4 to 4½ ft. ....	42.50	
40 4½ to 5 ft. ....	50.00	
10 5 to 6 ft. ....	60.00	

**VIRGINIANA**, Red Cedar, 30 to 40 ft.

Platte River Strain. Upright growth, deep green foliage, sometimes silver. Excellent pyramidal tree if kept sheared. Can be sheared into any form.

550 18 to 24 ins. ....	\$11.00	\$100.00
1400 2 to 3 ft. ....	15.00	135.00
1100 3 to 3½ ft. ....	17.50	160.00
1400 3½ to 4 ft. ....	22.00	200.00
350 4 to 5 ft. ....	28.00	250.00
50 5 to 6 ft. ....	37.50	
20 6 to 8 ft. ....	50.00	
100 12 x 12 ins. ....		

Globe Sheared

15 x 15 ins. .... 12.50 110.00

Globe Sheared

18 x 18 ins. .... 16.00 135.00

Globe Sheared

24 x 24 ins. .... 22.50 200.00

Globe Sheared

22.50 200.00

**VIRGINIANA BURKI**

Distinct blue, forming a dense column. Winter coloring, metallic-purple.

150 2½ to 3 ft. .... \$25.00

60 3 to 3½ ft. .... 30.00 \$285.00

100 3½ to 4 ft. .... 35.00 325.00

40 4 to 4½ ft. .... 40.00 375.00

40 4½ to 5 ft. .... 45.00 425.00

**VIRGINIANA CANAERTI**

Foliage deep, rich green. One of the best of the many grafted varieties.

280 2½ to 3 ft. .... \$28.00 \$250.00

150 3 to 3½ ft. .... 33.00 300.00

140 3½ to 4 ft. .... 37.50 350.00

100 4 to 4½ ft. .... 42.50 400.00

20 4½ to 5 ft. .... 50.00

**VIRGINIANA GLAUCA**, Silver Red Cedar,

15 to 20 ft.

Of striking blue color all season.

200 2 to 2½ ft. .... \$22.00 \$200.00

250 2½ to 3 ft. .... 28.00 250.00

160 3 to 3½ ft. .... 33.00 300.00

150 3½ to 4 ft. .... 37.50 350.00

**VIRGINIANA PYRAMIDALIS**, Pyramidal Red Cedar, 20 to 25 ft.

Green foliage, narrow columnar habit of growth. An attractive Evergreen.

	Per 10	Per 100
80 2½ to 3 ft. ....	\$27.50	\$250.00
30 3 to 3½ ft. ....	32.50	
40 3½ to 4 ft. ....	35.00	

**VIRGINIANA PYRAMIDIFORMIS**, Dundee, 15 to 20 ft.

The gray-blue color of this narrow pyramidal Juniper changes to purple during fall and winter.

40 3½ to 4 ft. ....	\$37.50	
50 4 to 4½ ft. ....	42.50	\$400.00
60 5 to 6 ft. ....	60.00	

## PINE

**BANKSIANA**, Jack, 40 to 50 ft.

Most northern of all pines. Hardy and fast growing. Foliage bright green.

60 5 to 6 ft. .... \$35.00

**MONTANA MUGHUS**, Mugho, 3 to 4 ft.

Deep green in summer and winter.

300 18 to 24 ins. .... \$19.00 \$175.00

100 2 to 2½ ft. .... 26.50 235.00

40 2½ to 3 ft. .... 30.00

**NIGRA**, Austrian, 60 to 70 ft.

Deep, rich green color. Growth close and compact. Coal gas and smoky atmospheres have little effect on growth.

220 2 to 3 ft. .... \$19.00 \$175.00

340 3 to 4 ft. .... 27.50 250.00

200 4 to 5 ft. .... 37.50 350.00

150 5 to 6 ft. .... 55.00 500.00

**STROBUS**, White, 50 to 100 ft.

A fast-growing pine that thrives on almost any kind of soil. Valuable for background or windbreak planting.

320 2 to 3 ft. .... \$19.00 \$175.00

200 3 to 4 ft. .... 27.50 250.00

100 4 to 5 ft. .... 37.50 350.00

**SYLVESTRIS**, Scotch, 60 to 70 ft.

Light green in color.

200 2 to 3 ft. .... \$16.50 \$150.00

200 3 to 4 ft. .... 22.50 200.00

100 4 to 5 ft. .... 30.00 275.00

30 5 to 6 ft. .... 40.00

## SPRUCE

**CANADENSIS**, White, 60 to 80 ft.

Dense habit of growth with silvery-green foliage.

220 18 to 24 ins. .... \$14.00 \$125.00

340 2 to 3 ft. .... 16.50 150.00

200 3 to 4 ft. .... 25.00 225.00

20 4 to 5 ft. .... 30.00

**CANADENSIS ALBERTIANA**, Black Hills, 40 to 50 ft.

Hardest of all Spruce. Symmetrical, compact and bushy habit of growth.

Foliage varies from green to bluish tint.

650 15 to 18 ins. .... \$11.00 \$100.00

840 18 to 24 ins. .... 15.00 135.00

700 2 to 2½ ft. .... 17.50 160.00

680 2½ to 3 ft. .... 22.00 200.00

180 3 to 3½ ft. .... 28.00 250.00

**EXCELSA**, Norway, 70 to 80 ft.

Sharp, pointed needles, green in color.

Used extensively for windbreaks and general planting. Rapid growth.

680 18 to 24 ins. .... \$14.00 \$125.00

200 2 to 3 ft. .... 16.50 150.00

200 3 to 4 ft. .... 25.00 225.00

100 4 to 5 ft. .... 33.00 300.00

**PUNGENS**, Colorado Green, 60 to 80 ft.

Symmetrical, upright habit. Light green, sometimes silvery foliage. Popular hardy tree. Succeeds in dry climates.

480 18 to 24 ins. .... \$19.00 \$175.00

620 2 to 2½ ft. .... 25.00 225.00

300 2½ to 3 ft. .... 30.00 275.00

80 3½ to 4 ft. .... 45.00 400.00

## WANTED

We are interested in novelties and new varieties in Perennials, Bulbs, Fruits, Ornamentals, etc.

We ship retail mail orders for catalogs having more than 2,000,000 circulation. In addition, we supply the larger agency firms, retail nurseries, department stores and all other outlets. With our unlimited facilities, we can quickly market large quantities of any item of merit.

Don't fail to write us when you have anything to sell.



"One of America's Foremost Nurseries"

**MOUNT ARBOR NURSERIES**  
**SHEANDOAH, IOWA**

E.S. Welch PRES.

# AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

*The Nurseryman's Forte: To Make America More Beautiful and Fruitful*

VOL. LXXXI, No. 6

CONTENTS

MARCH 15, 1945

Business Methods in the Small Nursery.....	5	By Peter Riedel	
Credits and Collections.....	9	By Ernest M. Bush	
New Plant Protection Products.....	11	By George C. White	
Colorado Trade and Amateurs Meet.....	12	By George W. Kelly	
Some Plants You Should Know.....	18	By C. W. Wood	
Editorial.....	4	—Arthur L. Norton.....	16
—National Arbor Day.....	4	—Frank H. Coon.....	16
—Advertising Control.....	4	Catalogs Received.....	17
—Living Memorials.....	4	Southwestern Notes.....	21
—But You Get the Idea.....	4	Red Cross Exhibit.....	21
Jap Beetle Quarantine.....	8	This Business of Ours.....	22
Connecticut Officers.....	8	—Capital.....	22
New England Association.....		Landscape Men's Problems.....	24
Publicity Committee.....	10	—Unstable Foundations.....	24
Control Jap Beetle in Illinois.....	14	—Nuisance Calls.....	24
Catches Escaped Nazis.....	15	—Soil-Soaker.....	25
Dallas Meeting.....	15	West Virginia Meeting.....	26
Obituary.....	16	Larger Redbud.....	27
—John K. Andrews.....	16	Sees Evergreens in West.....	27
—Michael H. Horvath.....	16	St. Louis Group Meets.....	27
		In the Country's Service.....	28
		—Missing in Action.....	28
		—Freed in Philippines.....	28
		—Long Island Secretary.....	28
		Forsythia Intermedia.....	
		Spectabilis.....	28
		Building Outlook.....	30
		New Books and Bulletins.....	38
		—Spray Chemicals and.....	
		Application Equipment.....	38
		—Pennsylvania Rose Tests.....	38
		Survey Phlcem Necrosis.....	40
		New Spray to Kill Weeds.....	42
		Texas Rates the Same.....	42

## INDEX TO ADVERTISERS

Allen & Co., Inc., S. L.....	40	Garden Shop, Inc.....	37	Pacific Coast Nursery.....	31
American Bulb Co.....	36	Gardner's Nurseries.....	19-21-24	Pacific Lumber Co.....	32
American Color & Chem. Co.....	40	Harrison Bros. Nurseries.....	25	Palmer & Son, J. R.....	27
American Florist Supply.....	43	Heasley's Nurseries.....	27	Peterson & Dering.....	31
American National Bag & Burlap Co.....	42	Herbst Bros.....	1	Pontiac Nursery Co.....	21
Andrews Nursery Co.....	29	Hess' Nurseries.....	23	Porter-Walton Co.....	33
Ariens Co.....	39	High Valley Farm.....	32	Portland Shingle Tow Co.....	37
Athens Nursery Co.....	26	Hill Nursery Co., D.....	44	Portland Wholesale Nursery Co.....	31
Atkins Sons, L.....	42	Hobbs & Sons, C. M.....	29	Princeton Nurseries.....	25
Bagatelle Nursery.....	23	Holton & Hunkel Co.....	24	Rich & Sons Nursery.....	30
Bailey Nurseries, J. V.....	27	Hoogendoorn, C.....	21	Richardson Label Co.....	33
Barclay, Hugh B.....	21	Horsford, Wm. Crosby.....	23	Robinson, E. D.....	20
Belt Seed Co., Inc.....	36	Howard-Hickory Co.....	15	Rockmont Nursery.....	32
Bobbink & Atkins.....	23	Howard Rose Co.....	31	Saraceno Asparagus Nursery.....	36
Boyd Nursery Co.....	27	Hunziker & Sons, M. J.....	29	Scarff's Sons, W. N.....	29
Broadway Rubber Mfg. Co.....	41	Hydroponic Chemical Co.....	40	Schuykill Chemical Co.....	40
Brownell Roses.....	21	Ilgenfritz' Sons Co., I. E.....	17	Schupp Florist Supply Co.....	42
Bryant's Nurseries.....	16	Jackson & Perkins Co.....	26	Scott, Thomas W.....	37
Burr & Co., C. R.....	23	Jewell Nurseries.....	16	Shepard Nurseries.....	23
Burton's Hilltop Nurseries.....	27	Johnston, Wm. A.....	31	Sherman Nursery Co.....	27
California Nursery Co.....	36	Kallay Bros. Co.....	27	Sherwood Nursery Co.....	30
Carpenter & Co., Geo. B.....	41	Kenyon's Nursery.....	29	Sizemore, Charles.....	20
Carroll Gardens.....	23	Kirkland Nursery Co.....	32	Smith Corp, W. & T.....	25
Cashman Nurseries, Inc.....	15	Koster Nursery.....	18	Sneed Nursery Co.....	27
Chase Co., Benjamin.....	37	Krieger's Wholesale Nursery.....	29	Soil Research Laboratories, Inc.....	39
Christianson Landscape Service.....	32	LaBarr's Rhododendron Nursery.....	25	Somerset Rose Nurseries.....	42
Classified Ads.....	34-35	Lake's Shenandoah Nurseries.....	24	State Road Nursery.....	20
Cloverset Flower Farm.....	43	Leligh Valley Nurseries.....	19	Storrs & Harrison Nurseries.....	28
Coe, Converse & Edwards Co.....	29	Leonard & Son, A. M.....	41	Studley Nursery, Walter A.....	27
Colby Pioneer Peat Co.....	42	Lovett, Lester C.....	23	Sudbury Soil Test Lab.....	40
Cole, R. M.....	24	Lutz Peony Farms, Phil.....	27-28	Summitt Nurseries.....	29
Corliss Bros., Inc.....	14	Markham's Ohio Nursery.....	41	Suncrest Evergreen Nurseries.....	27
Crystal Soap & Chem. Co.....	40	McCarver & Son, Johnie.....	26	Swink Nursery Co.....	32
Curtis Nurseries.....	25	McGill & Son, A.....	31	Texas Floral & Nursery Co.....	25
Dayton Fruit Tree Label Co.....	37	McHutchison & Co.....	37	Verhalen Nursery Co.....	27
Doty & Doerner, Inc.....	31	Meehan Co., Thos. B.....	26-42	Wallace Seed Store.....	28
Dow Chemical Co.....	40	Milton Nursery Co.....	31	Want Ads.....	38
Drewette, R. B.....	24	Moran, E. C.....	36	Washington Nurseries, Inc.....	36
Dummett, Arthur.....	20	Morse Co., A. B.....	42	Waukegan Nurseries.....	23
Egyptian Nursery.....	28	Mount Arbor Nurseries.....	2	Wayside Nurseries.....	29
Evergreen Nursery Co.....	27	Mount Vernon Nursery.....	30	Weller Nurseries Co.....	29
Fairview Evergreen Nurseries.....	26	Musser Forests, Inc.....	17-21-22-32	Westminster Nurseries.....	25
Farmers Wholesale Nursery.....	17	National Landscape Institute.....	41	Willis Nursery Co.....	19
Felins Tying Machine Co.....	41	New Amsterdam Co.....	42	Wood-Howell Nurseries, Inc.....	13
Fischer Nursery.....	24			Woodruff & Sons, Inc., F. H.....	37
Forest Nursery Co., Inc.....	19			Zephyr Hill Nursery.....	25

Published on the first and fifteenth of each month by American Nurseryman Pub. Co., 343 S. Dearborn St., Chicago 4, Ill.  
 Telephone: Wabash 8194. Subscription rates: \$1.50 per year; outside United States, \$2.00; single copies, 10c.  
 Entered as second-class matter December 14, 1935, at Chicago, Ill., under act of March 3, 1879.



# AMERICAN NURSERYMAN

F. R. KILNER, Editor

## Editorial

### NATIONAL ARBOR DAY.

The proposal to establish a national Arbor day, last year initiated by Edward H. Scanlon, editor of *Trees* magazine, has made some headway, although its author's service in the navy until recently diminished his activity. The governors of some states expressed their favorable impression with the idea, while Governor Hickenlooper of Iowa proclaimed the date suggested, the last Friday in April.

With the support of some organizations, the project for a national Arbor day is still active, and nurserymen may wish to support it as a means of drawing public attention to tree planting.

The proposal of a national Arbor day recognizes that the time for tree planting varies according to the latitude of the different states. At present some states have dates set by act of the legislature, and in others the governor annually proclaims a day. In some cases this is a formality, in others it is neglected and in some there is a definite enthusiasm expressed.

Were a national Arbor day observed, unity would be given the celebration throughout the country and consequently more attention would be given to the date in the public press and in observances of all kinds. The tree planting itself, obviously, would be done at a different date, when the weather in the locality was fitting.

Arbor day most certainly has had less attention than it deserved. So the proposal of a national program has merit.

### ADVERTISING CONTROL

Apparently the newspapers of Great Britain are not free from the type of horticultural advertising which occasionally brings complaints on this side of the water. In the past few years some trade organizations in the United States have remonstrated with publishers about such advertising and have usually received a favorable hearing, because the publishers for the most part recognize a responsibility to their readers that outweighs commercial considerations. Whether publishers in England are less inclined to recognize that responsibility is not apparent, but the

## The Mirror of the Trade

Horticultural Trade Association proposes a novel method of eliminating undesirable horticultural advertisements, as is shown by the following announcement in the February 7 issue of the association's organ, the *Horticultural Advertiser*:

At the request of a few H. T. A. newspaper advertisers, the general secretary has sent an exploratory letter to some thirty or so of the principal reputable horticultural advertisers in the national daily and weekly press.

The letter inquires whether these principal advertisers desire, and are prepared to pay for, the setting up of a control board to exercise control over horticultural newspaper advertising.

A subscription of £25 from each firm is tentatively suggested, as it is estimated that some £600 would be necessary to start the organization and pay for its office accommodation, equipment and staff. A competent shorthand typist today will cost £250 a year.

For the past twenty-five years at various times the H.T.A. council has made representations to newspapers regarding certain undesirable horticultural advertisements. These representations, so far as the national daily and weekly press is concerned, have been utterly fruitless. The reply has always been: "Most of your members are nonadvertisers in our papers" (which is perfectly true) "and we must defend our advertisers from the attacks of their trade competitors who do not advertise with us at all." Newspapers and their advertisement managers are moved by commercial considerations, and it is realized that they will listen only to a board consisting of their own advertisers, who can talk to them on their own terms.

The general secretary has received from a trade source details of the value of the advertising space taken by the principal horticultural advertisers, and while this, compared with other trades such as the drapery trade, is small, it yet represents in the aggregate a sufficient sum of money to be able to influence newspaper proprietors both collectively and individually.

If the principal advertisers desire the board to be set up they are asked to say so, or if not, to notify their dissent.

### LIVING MEMORIALS.

The idea of honoring heroes of World War II with living memorials has developed interest so rapidly that already plans are under way for many monuments of this kind. One of the first communities so to honor its war heroes was Beckley, W. Va., and on Pearl Harbor day, December 7, 1944, South Charleston, W. Va., took steps to dedicate an area.

In a recent issue of "West Virginia Conservation," D. B. Bonebrake, acting state forester, told of the growing interest in the program and suggested suitable and needed projects:

"It is significant that the campaign

has grown beyond the talking stage. Garden clubs, civic organizations and corporations are seeking sites to develop. Servicemen have already expressed their pleasure regarding the campaign and have endorsed the plan of extending the project to include park facilities, with suggestions for raising development and maintenance funds by organizing living memorial associations to be the beneficiary of war bonds. The appeal of a living memorial over a lifeless, cold stone or metal, bird-lime covered statue is so great no one disputes the purpose. Ridiculous mistakes can be made in selecting living memorial projects just as offensive mistakes were made in statuary memorials.

"Perhaps the safest and most needed project would be for a community to acquire by purchase or lease areas accessible for park and playground use and develop these areas to provide wholesome, simple day-use recreation by installing playground equipment and providing sites properly landscaped without great expense, but so designed as to permit subsequent expansion and improvement. Every county in the state has tax delinquent land suitable for county forests. These lands by legislative action could become county property and by proper forest management support community parks."

### BUT YOU GET THE IDEA.

The following quotation was attributed to a trade association executive in another field—not a nurseryman, obviously, from his belief in roots without anything growing above them:

In introduction one might quote a line from Joyce Kilmer's "Trees"—that one about the "nest of robins." Anyway, something got in this man's hair, trees or no trees. He said:

"It may appear to some of you, viewing all these contacts and all this work we have done in Washington, that the tangible results were not many.

"Well, we plowed, we harrowed, we raked and fertilized the soil. We planted a great many seeds, and hoped they would grow up to be majestic and fruitful trees.

"We cannot yet lie under the branches of these hoped-for trees and rest in the shade of their leaves. There is no shade. There are no leaves. Gentlemen, there aren't any trees. But we believe there are roots."



*By Peter Riedel*

When these calculations have all been made and transferred to chart V, this chart then displays the cost of single operations only, not including

Per 100-#, or min.	B	C	D	E	F	G	H	J	K	L	M
<u>Containers:</u>											
1. size	2	2½	3	4	5	6	8	¢	c	F	Ref. line
2. Cost per 100	90	110	130	200	300	415	975	100	600	2500	
3. 20% of 2.	18	22	26	40	60	83	195			500	1
4. 80% of 2.	72	88	104	160	240	332	780			2000	1
5. Cleaning-minutes	24	27	30	36	42	48	60				exp.
6. " cost	10	11	12	15	17	20	25				5
7. 80% cost-clean S.	62	77	92	145	223	312	755				486
Soil-same amt.fills	144	72	36	18	9	6	4	4			9
9. 1 cub.ft. fills	336	168	84	43	21	14	9	9	1 3/7	2	exp.
10. 1 cub.yd fills	9092	4536	2268	1161	567	378	243	243	46	54	9
11. Cost-2.70 yd	3	6	12	23	47	70	110	110	700	900	9
<u>Shift or pot:</u>											
12. No.per hour	170	138	125	56	50	41	28	28	28	5	exp.
13. Cost-50¢ hr.	30	37	40	90	100	120	170	170	170	1000	12
14. Cost-75¢ hr.	45	57	60	135	150	180	255				12
<u>Standing-rooms:</u>											
15.sq.ft. occupied cost per quarter	4.32	6.66	9	16	25	36	64	64	100	300	exp.
16.at 1.75¢ per ft	7.57	11.65	15.75	28	43	75	63	112	112	175	525
17. 25¢ added 2.1¢ per ft	9.46	14.56	19.69	35	54.69	79	140	140	219	656	15
18. for 6 months 4.2¢ per ft.				70	109.38	158	280	280	438	1312	15
19. for 9 months 6.5¢ per ft				105	164.07	237	420	420	657	1968	15
20. for 12 months 8.4¢ per ft				140	222.6	316	560	560	876		15
21. GH.SR. 6 week 12.5¢ per ft		54.82	25	112.5	200	312.5	450	800			15
22. GH.SR. 3 mo. 25¢ per ft	100	166.5	225	400	625	900	1600				15

the previous cost of producing the material that is the subject. For instance, at V-D-11 the figure 238 indicates that it costs \$2.38 to shift 100 plants from 2-inch pots to 4-inch pots; the preceding figures in column D indicate what it costs to shift 2-inch pot plants to 2½ and 3-inch pots respectively and have no bearing on the cost of shifting to 4-inch. Exceptions are all the figures on line 2 put there for convenience in solving individual problems and representing the accumulated costs of the lot up to time of the next operation. On this line, the figure in B2 represents the assumed cost of cuttings and seedlings ready for a container; cheap plants, ready for pricking off into a selling flat, are assumed to cost 9 cents per hundred, and pricking them off, plus caring for them for six weeks, costs 77½ cents. This was not included in this chart for lack of space. In certain

nurseries, figures must be given for the cost of lifting plants from open ground and planting them in cans, either balled or bare-root.

Chart V now should supply all the basic figures necessary to compiling the cost of any lot of plants, arrived at its present state of development by any combination and sequence of operations in general use in the nursery for which it is constructed. There is, of course, a wide variance in the ultimate cost of various lots of plants, the cost being less when they grow quickly and are not particular and when size jumping can be freely practiced, and the cost being higher when they are slow-growing, do not bear overpotting and must be shifted from one container only to one that is but one size larger. The combination of cost-giving figures, then, will differ according to the class of stock grown and the practices followed and must be

determined for each nursery separately or for each class of plants separately. To make a chart covering all cases possible is impracticable; there are over 600 different combinations.

So, at the bottom of chart V appear a few examples of cost figuring by means of this chart, based on the most common practice, the results used as a basis in this series of charts. The index symbols appended refer to the location on the chart whence component figures were obtained.

It is hardly likely that a nurseryman, when wondering about the cost of a batch of plants, will remember the various operations performed on it. It is, therefore, imperative that some record be kept of all performance. This necessitates that each batch of plants be given a batch number for identification and that all operations performed on all batches be promptly entered in a daybook from which they may be entered into a batch ledger where the complete history of each batch is gathered under its number. For identification, the label on any batch of plants should carry the batch number and, preferably, this label should be large enough to carry also an abbreviated history of the batch. Then, by pricing the operations from chart V, a label reading "2.3¢" would show that the gallon cans which it labels have cost 2.50 (V-B-2) & 132.46 (V-B-5) & 156.69 (V-D-9) & 696 (V-H-15), or a total of 1135.15 cents per hundred, which, increased by the markup percentage, will give the minimum price for which it may be sold.

#### Field Nursery Costs.

##### Chart VII.

To cost accounting in the field nursery, the same pattern, simplified, could be adapted. Assume:

Area, 2 acres, 87,120 square feet.  
Overhead costs, rental, taxes, interest on investment and supervision, etc. \$ 526.00  
Maintenance and care, water, labor, etc. 1360.00  
Cost of plants destroyed or died 130.00

Total ..... \$2016.00  
Number of plants in the nursery.....5600  
Average area occupied by each 12 sq. ft.  
Total area actually occupied.....  
.....5600 x 12 = 67200  
Cost per foot of occupied area 20160

67200 : 3c  
Cost per year per average plant 12 x 3 = 36c  
Production and delivery of lining-out stock .....5c  
Extra delivery costs  
divide total by number of plants sold..4c  
Balling, average, per plant.....30c

A field-grown plant will cost, as lining-out stock, 5 cents; delivery, 4 cents; for each year in the nursery,

CHART V. GROWING ON.

Cost of single operations, per 100 plants, in cents.

	A	B	C	D	E	F	G	H	J	K	L	M	N	Q
1. from-	PB	NF	2"	2½"	2½"	2½"	3"	4"	5"	6"	8"	¢	c	
2. start	250	350	380	442	420	506	540	730	1120	1615	2770	1250	2750	
3. to SF	77													
4.	NF	100												
5.	2"	132	132											
6.	2½"	192	192											
7.	2½"	167	167	102										
8.	2½"	256	256		191									
9.	3"	201	201	156		118								
10.	3"	314	314		249		231							
11.	4"			238		220	220	194						
12.	5"					423	423	388						
13.	6"							545	493					
14.	8"							1282	1180	1153				
15.	¢			650		632		696	632	530				
16	c							2242	2178	2076	1958	1481	2236	1450

In the above, decimals have been disregarded.

#### Examples of cost calculation for successions in common use.

SE. 9	IIIC9	250	VB2	¢	250	VB2
77.5	IIIC22	132.46	VB5	¢	250	VB2
86.5		156.69	VD9	¢	100	VB4
		194	VB11	¢	201.69	VB9
NF. 250	III25	388.38	VJ12	¢	696	VO15
100	VB4	1121.53		¢	1247.69	
350				¢		
2"		250	VB2	¢	250	VB2
250	VB2	132.46	VB5	¢	102.56	VD7
132.46	VB5	156.69	VD9	¢	220	VF11
382.46		194	VB11	¢	2178	VJ16
2½"		388.38	VJ12	¢	2750.56	
250	VB2	493	VK6	¢		
167.56	VB7	1614.53		¢		
417.56				¢		
3"		250	VB2	¢		
250	VB2	132.46	VB5	¢		
132.46	VB5	156.69	VD9	¢		
156.69	VD9	194	VB11	¢		
339.15		388.38	VJ12	¢		
4"		493	VK6	¢		
250	VB2	1153	VL14	¢		
132.46	VB5	2767.53		¢		
156.69	VD9			¢		
194	VB11			¢		
733.15				¢		

CHART VI. CONSTRUCTION OF CHART V.

The symbol in the upper left-hand corner indicates the location of result.

B5 to 2"	90	IVB2	D15: 2-2"	100	IVJ2	G10: 2-2"	130	J12: 4-6"	IV	K15: 5-2"	IV
	3	B7	-62 38	R7	J11	-77 53	IVD2	415	G2	100	J2
	30	B13	170	B3	-6	60	D11	-145	E7	-223	F7
	9.46	B17	2	85	J17	112.50	F14	70	G11	110	J11
	132.46		2	420	J19	231.50	D21	-23	E11	-47	F11
B6 to 2"	90	IVB2	680					120	G13	63	J13
	3	B11						2	G18	170	J19
	45	B14						158		420	
	54	B21						545		653	
	192									530	
B7 to 2 1/2"	110	IVC2	E8: 2-2 1/2"	110	IVC2	G11: 2-4"	200	J14: 4-8"	IV	K16: 5-c	IV
	6	C11	-62 48	B7	C7	-77 123	E11	975	H2	600	K2
	37	C13	-2 3	C11	-6 17	23	C11	-145	E7	-223	F7
	14.56	C17	57	C14	2 45	220	E13	110	H11	700	K11
	167.56		83.25	C21	-90	220	E17	-23	E11	-47	F11
B8 to 2 1/2"	110	IVC2	F10: 2-2 1/2"	130	IVC2	G12: 2-2 1/2"	220	85	H13	170	K17
	6	C11	130	B7	H11: 3-4"	110	IVF2	280	H18	876	K20
	57	C14	-62 68	E2	-92 108	40	E17	1282		2076	
	81.25		12	E11	23	11					
	256.25		-3 9	F14	-12	40					
			60	F22	194	35					
B9 to 3"	130	IVD2	F2: 2-3"	130	IVD2	H12: 3-5"	300	J15: 4-6"	IV	L14: 6-8"	IV
	12	D11	-77 53	C7	E11	-92 208	IVF2	100	J2	975	H2
	40	D13	12	E11	-92 208	47	E7	145	E7	-312	G7
	19.69	D17	-6 6	C11	-12 35	100	F11	110	J11	110	H11
	201.69		40	D13	100	50	D11	-23	E11	-70	G11
B10 to 3"	130	IVD2	F11: 2-4"	200	IVE2	H15: 3-4"	IVJ2	677	E11	40	G11
	12	F11	-77 123	C7	E11	100	IVD7	170	K13	170	H13
	60	F14	23	C11	-92 8	110	J11	876	K20	1958	K20
	112.50	D21	-6 17	C11	110	98	D4	2178			
	314.50		30	E13	-12 98	170	J13				
D7: 2-2 1/2"	110	IVC2	F12: 2-5"	300	IVF2	H16: 3-c	IVK2	K12: 5-6"	IV	600	K2
	6	B7	-77 223	C7	F11	600	D7	415	G2	-755	H7
	-3	C11	-6 41	C11	-92 508	700	K11	-223	F7	-700	H11
	37	B11	100	F13	12 683	170	D3	415	G11	-110	H11
	14.56	C13	2	F18	12 683	876	K13	-223	F7	590	K17
	102.56	C17	50	F18	12 683	2242	K20	70	G11	170	K17
D9: 2-3"	130	IVD2	F15: 2-4-c	100	IVJ2	J12: 4-5"	IVF2	-47	G13	120	K17
	68	B7	-77 23	C7	J11	145 155	E7	975	F11	120	K17
	12	D11	110	C11	-6 104	47	F11	-223	G18	158	K20
	-6	B11	170	J17	2	85	F13	752		493	
	60	D14	2	J19	420	100	F18	110		1281	
	19.69	D17	632		596	109.38		2			
D11: 2-4"	200	IVE2				388.38					
	-62	B7									
	23	E11									
	-3	B11									
	30	E13									
	2	E17									
	238										

36 cents; balling, 30 cents; so that a 2-year plant ready for sale costs a total of 111 cents.

#### Selling Costs. Chart VIII.

This treatise can offer nothing on the subject of selling costs but what is well known in ordinary business practice. However, many nurserymen seem only vaguely to understand the matter and, since they are complementary to the foregoing discussion, a few observations on the subject may be useful. For the same imaginary nursery for which the previous charts were prepared, the following is a list of expenses that may, in whole or in part, and with figures that fit the facts, be a pattern for any nursery:

Catalog .....	\$ 200.00
Advertising .....	360.00
Contributions, memberships .....	150.00
Office expenses and supplies .....	200.00
Bookkeeper's salary .....	1200.00
Salesman's salary .....	1200.00

Accommodation service, unpaid bills .....	200.00
Shipping expense, packing material .....	200.00
Salesroom and display .....	300.00
Delivery .....	1235.00
Plants unsold and destroyed, replacing .....	500.00
Half of the overhead expenses .....	1055.00
Total selling expense .....	\$680.00
Assume one-quarter of this for selling accessories .....	1700.00
Then the cost of selling plants is ..	\$5100.00

Assume the volume of sales nearly as anticipated or \$25,000 (I-R-20) then the selling expense is more than one fifth, or twenty per cent of the sales volume. To this should be added a profit, say ten per cent, so that, out of a dollar sale, 10 cents is for profit, 20 cents for selling and 70 cents remains for production; thus a plant with a production cost of 70 cents must be marked up 30 cents to cover the selling expense and give a margin

of profit. Since 30 cents is practically 42.85 per cent of 70 cents, all production costs must be marked up 42.85 per cent to allow a ten per cent profit out of sales.

Chart IX shows how any change in the selling cost necessitates a change in the rate of markup over production cost. Chart X applies various rates of markup to the production costs of various sizes of plants, as obtained from the preceding demonstration charts, and fixes the minimum selling price of each. Where the selling cost is low, the selling prices so obtained seem quite low in comparison with the prevailing prices contemporaneous with the assumed daily wage rate of \$4. That such prices prevailed and yet none of the nurserymen grew rich is proof sufficient that costs generally were higher than those assumed in this paper.

This probably was due to one or all of three major causes: Dumping,





# Credits and Collections

By Ernest M. Bush

Sales, credits and collections go hand in hand down the nurseryman's pathway leading to success or failure.

You nurserymen are the sellers. Mr. John Q. Public is the buyer. The profit or loss in each transaction is your responsibility. You are responsible for the following component parts of the transaction:

1. Customer confidence.
2. Customer integrity.
3. Customer contract.
4. Customer satisfaction.

Let us take these four component parts as enumerated. First, "customer confidence." What are you, as the seller, doing to impress Mr. Prospective Customer that he is making a wise investment when he landscapes his home grounds, plants a hedge or decides to start an orchard? Are you impressing him with the magnitude of the nursery business in general—with the fact that if literally millions of homeowners throughout our U. S. A. did not believe in the benefit of planting nursery stock, this enormous industry would not exist? Do you call his attention to another fact—that with every home the paint must be replaced every four to six years, sometimes oftener; the furniture becomes worn out or outmoded and must be replaced; radios, washing machines and other such accessories wear out, but the planting around the home or on the farm improves in value from year to year? It actually increases the value of the property from ten to twenty times the original cost of the planting.

In other words, do you thoroughly seal in the mind of your customer the important fact that his decision is wise and his investment is of the best?

You may say, "What has this to do with collections?" My contention is that the collection is, figuratively speaking, made at the time of the sale. If the customer is sold on the organization, on the industry as a whole and particularly on the quality of the merchandise he is to receive, there is less opportunity for petty grievance, unjustifiable complaints or adverse thinking on the part of the customer, and the money is ready for payment of the merchandise at the time of delivery or

as soon as the planting job has been completed by the nurseryman.

Second, "customer integrity." You may say this is not your responsibility and perhaps you may say that you have no control over your customer's financial status or his integrity, but you certainly have. If you take Mr. Customer's word for his responsibility and do not insist upon proper references, and do not go outside the references he gives, you are quite likely heading into trouble. I am now speaking of the customer with whom you are not acquainted and with whom you have not heretofore carried on a business transaction satisfactorily.

You should consult the bank, and if you are not sufficiently satisfied you should then use some such credit agency as Dun & Bradstreet, Hooper Holmes, Retail Credit Co. or some of those who make a business of looking up the financial status of customers.

It will cost about \$1 for the investigation, but isn't it wiser to invest that \$1 than to plunge headlong into a \$75 or perhaps a \$500 contract and invest your nursery stock, your labor and all that goes with it, only to find that the party for whom you have done the work is not responsible and, in fact, the property is entirely in the name of the wife, or his equity in the property is so small that it is negligible and therefore collection is out of the question?

Rather than to say to yourself, "He looks all right; guess he will pay," if the amount involved is \$25 or more, leave no stone unturned to unearth all information possible until you are satisfied that your material and your time expended on this order are a good investment for you. It is far better to reject one order that perhaps would have paid than to accept a half-dozen orders that do not pay.

Third, "customer contract." Do you operate on a word-of-mouth agreement or do you insist on a signed contract? If your prospect hedges on signing a contract and tells you no contract is needed in his particular case, that is the time to become skeptical. Be insistent that a contract be signed covering the complete agreement.

If, as the job progresses, your customer asks you to do additional work

or put in additional stock, make out another agreement covering the cost of the stock and the cost of the work and have it signed by the customer.

There have been altogether too many instances where the scheming customer authorized a job at a certain stipulated price and after it was under way suggested that something more be planted or some other job be incorporated, for which he stated plainly he expected to be charged. Usually no price is mentioned, verbal or otherwise. Perhaps you have been advised that if the customer's wife wants certain additional work done, you are to do it and charge it in on the job, and the missus finds this, that and the other thing that she would like to have done. You do it without a contract. Finally the job is completed, the invoice is rendered and the fun starts. Mr. Customer had no idea it was going to run into that amount of money. He had no idea Mrs. Customer was going to have that additional work done. He will tell you that all you did was to put in thirty-four more shrubs and you doubled the cost. How come?

You explain about the additional excavation or filling, that there was more topsoil used and you ran into rocks to be moved, and so on, but Mr. Customer can't and won't see it. It is absolutely out of the question where he is concerned. You have no contract and you are the loser. If you go to court, you have an attorney to pay. If you don't go to court, you discount your profit and invariably a part of your expense.

Avoid such confliction; get a signed agreement on the original, as well as all subsequent transactions.

Likewise, it is well that the contract include the statement, "I own the land on which to grow this stock and am financially responsible." The customer, having signed such an agreement, has obtained materials, labor, etc., under fraudulent pretenses if he does not own the land and is not financially responsible, and this particular phase of the contract is beneficial if legal action may become necessary.

Fourth, "customer satisfaction." You may have established 100 per cent customer confidence, satisfied yourself of his financial responsibility and sewed him up with a contract as binding as a note or mortgage, but if you have failed to deliver the goods; that is, to complete the

Talk given by Ernest M. Bush, of C. R. Burr & Co., Inc., Manchester, Conn., at the annual meeting of the New England Nurserymen's Association.

transaction with customer satisfaction, you are still subject to loss. It is only human nature to refuse to pay for inferior goods, or even top-ranking goods poorly placed or planted.

Last spring, during the regular planting season, a customer of one of our good and trustworthy salesmen came into the office and asked if we would plant his stock for him; business called him out of town and he had no time to do his own planting. We agreed to plant at \$1.50 an hour. That was satisfactory; so I wrote the agreement down on a regular order form, and he signed it.

One of our experienced planters was put on the job. When the customer returned he phoned me and refused to pay for the stock, claiming it was a bunch of junk. I went out to see him. Sure enough, it was the most discouraging sight; Pfitzer junipers planted with the side facing forward, globes with the standards six or eight inches above the ground and all planted in a straight line like a bunch of tin soldiers.

That customer was absolutely right in his refusal to pay. Should I argue with him? Not for a moment. I agreed wholeheartedly that he should not pay for a job so poorly executed. I merely said, "Don't worry—leave the entire matter to me." The following day, under proper supervision, the stock was replanted, the lawn edged up ahead of the planting and everything left spick-and-span. Nothing was said to the customer.

Within two days this same customer walked into our office all smiles and left his check in full settlement. He was enthusiastic about the improved appearance of his home and asked that we build an outdoor living room for him next spring. The prospect of more orders from this customer could have been ruined and business turned away by our insisting that his contract be fulfilled.

We have covered four points necessary to the collection of a contract. Now, to get to actual collecting on that ten to fifteen per cent of the customers who do not conform to the terms of the contract into which they have entered.

Having eliminated the poor pay customer originally, insofar as it has been possible to do so, and having endeavored to build up confidence and customer satisfaction, still we have a few, insofar as the percentage is concerned, that have not laid the money on the board.

Let's not get excited about this. Instead, do just what the average organization has always done and probably always will continue to do.

Send out statement No. 1, statement No. 2 and statement No. 3, preferably not to exceed ten days to fifteen days apart. On statement No. 3 write the words, "Terms were strictly cash. May we please have your remittance?"

Invariably, if this does not bring results, I have made it a habit to write the customer that three statements have been rendered without result, that I am confident the statements are not reaching him and that, therefore, I am registering the letter, receipt requested, to be sure this statement gets into his hands.

This procedure invariably will bring results from the majority of customers. They know you have the signed registry receipt cards and you know they have received your letter.

Invariably, the majority of those customers will either pay part of the account and state when they will pay the balance or they will explain to you why they have not paid the account. You then have the individual with whom to deal. You do not treat all of these customers alike. You take each case on its own merit.

Perhaps someone in the family is sick and there have been heavy doctor bills; you find that these statements are correct. There is just one course. Play ball with that customer. If you do, you will invariably get every grade that is due you, besides the gratitude of the customer and a lot of good will which cannot be bought under any circumstance.

We also have a series of envelopes that are known as collection envelopes, put out by Curtis 1000. They are self-addressed. Inside the envelope is the story. The customer merely puts his check or money order in the envelope and sends it back. The entire story is on the flap of the envelope. It is sealed; no one

sees it when he returns the letter and the account is paid. These envelopes work admirably.

Then you have the bone of contention—the customer who sits tight and says absolutely nothing. What are you going to do with him? If he is in sufficiently close proximity, call on him by all means. If he is not sufficiently close, but you can reach him by telephone without too great an expense, telephone him; get him to talk to you through some hook or crook; get him to make a promise; get him to commit himself; once he is committed, you are headed in the right direction.

Supposing after all this effort you [Continued on page 39.]

### NEW ENGLAND ASSOCIATION PUBLICITY COMMITTEE.

The proposals for a publicity campaign to be undertaken by the New England Nurserymen's Association represented the result of much thought and careful study by the publicity committee, as formulated in its report published in full in the March 1 issue of the American Nurseryman.

All three members of the committee represent landscape firms. Homer K. Dodge, chairman of the committee, is a partner in the Landscape Service Co., Framingham, Mass., which he organized with Frank A. Nanatovich in 1940. Born at Des Moines, Ia., in 1906, he moved with his family near Pittsburgh, Pa., in 1918. Graduated in 1929 from Pennsylvania State College in the course of landscape architecture, he became instructor in that subject at Penn State for two years. After attending the graduate school of landscape architecture at Harvard University, followed by a brief venture into other fields during the depression, he was manager of the landscape department at Framingham for the Bay State Nurseries from 1934 to 1940, when he established his own business. Married, he has three daughters and is active in local civic affairs.

The other members of the committee are Warren W. Richards, proprietor of the Clinton Nurseries, Clinton, Conn., established about 1922, and George M. Fellows, a veteran of World War I, who was for many years salesman and landscape manager for Charles R. Fish & Co., Worcester, Mass., and since the death of Charles R. Fish a couple of years ago, one of the joint managers of the business with two of Mr. Fish's sons. This year Mr. Fellows was elected president of the Massachusetts Nurserymen's Association.



Homer K. Dodge.



# New Plant Protection Products

By George C. White

DDT (dichlorodiphenyltrichloroethene) was first compounded by Othman Zeidler, a young student at Strasbourg, France. After its production, little attention was paid to it because the J. R. Geigy Co., of Basle, Switzerland, and a great many other chemical companies in Europe at that time were primarily interested in chemicals that were of some use in the production of dyes.

About four years ago the Swiss potato crop was seriously threatened by one of our native American pests, the Colorado potato beetle. No doubt some will wonder why they did not use the good old American remedy, arsenate of lead. However, the truth is that there is little, if any, arsenate of lead produced in Switzerland, and large quantities of it were not available in time to save the crop. Among the various chemicals tried to control the pest was a dust containing one per cent of the almost forgotten chemical DDT. Needless to say, a wonderful control was accomplished and the crop saved.

It should not be supposed that DDT is the answer to all insect problems—it definitely is not. There are some insects which seem to thrive on DDT. I say "seem" because this not actually is the fact. What happens is that those insects which seem to thrive have been relieved of their pests, known as predators. I might point out that DDT seems to have practically no control over red mite on fruit trees or red spider and little control over several other insects, including the Mexican bean beetle. At least, results up to now have not shown DDT to be so effective in the control of some insects as our old-fashioned remedies.

In the fall of 1942, a small amount of Gesarol, a compound containing DDT, was received by the Geigy Co. at New York from Switzerland. At that time the army was looking for an effective insecticide for the control of lice, mosquitoes and other pests which carried diseases among the troops. Pyrethrum was no longer available in the large quantities needed. Various governmental agencies

went to work on the small sample of DDT available and were much encouraged by the excellent results obtained.

In the spring of 1943 the manufacture of DDT was commenced at Cincinnati. Today a number of concerns are engaged in the manufacture of this material.

There have been a few pounds released here and there to agricultural experiment stations and others

for experimental work on agricultural and other pests. This work will undoubtedly bear fruit in the near future. Early experiments have shown an excellent degree of control of some of our worst insect pests, such as bean leaf roller, blister beetle, cabbage looper, Colorado potato beetle, corn leaf hopper, cross-striped cabbage worm, garden leaf hopper, harlequin bug, melon worm, pickle worm, southern army worm and spiraea aphid, with concentrations of six-tenths of one per cent to three per cent of DDT. One of our worst pests in the east is the Japanese beetle, and an excellent measure of control has been obtained with DDT at the rate of one pound to 100 gallons, as reported by Dr. Hadley, of the Moorestown laboratory, at a recent meeting of entomologists at New York.

Lindens sprayed with DDT solution went through the beetle season with practically no foliage injury, whereas the same variety of linden not sprayed was practically defoliated, and for as long a period as almost two months dead beetles were dropping from the treated trees during the flight season.

Beds which received a treatment of DDT at the rate of twenty-five pounds per acre of ground, used with a filler so as to get an even spread, were practically entirely free from beetle grubs when the plants were dug in September, whereas check beds had large numbers of grubs present.

It has been noted that fruit trees sprayed with this insecticide against various insect pests have not later been attacked by borers, probably because of the run-down of the insecticide onto the trunks of the trees.

Research men are active in ascertaining the degree of toxicity of DDT to human beings and warm-blooded animals, and it seems to be fairly well established that DDT is somewhat toxic and should be used with care. This is especially so when DDT is mixed with deodorized kerosenes or other oils. Water solutions may prove somewhat less toxic, and probably the least toxic would be dusts.

It has been said that one gram of DDT taken internally would be a lethal dose for most human beings.

One of the most outstanding properties of this new material is that it is both a contact and stomach in-

[Continued on page 31.]



GEORGE C. WHITE.

George C. White, vice-president of the New Jersey Association of Nurserymen, was born and educated in England and began his horticultural career there at Parsons Nurseries, Worcester. Many varieties of apples, including the popular King Edward, were propagated at this nursery, located in England's second largest fruit-growing county, Kent being the largest.

Later Mr. White took a position in the agricultural seed department of Toogood & Sons, Milbrook. Part of his duties included the supervision of the roguing of the seeds. From Toogood & Sons, Mr. White went to J. P. Barton Co., Eastleigh, which concern dealt large in seeds and feeds. He had charge of the seed department and developed a line of flower and vegetable seeds, bulbs, insecticides and other supplies.

Mr. White came to the United States in 1927 and entered the firm of Stumpff & Walter Co., New York, N. Y., and spent a year looking after its vegetable seed trial grounds at Farmingdale, L. I.

In 1928 he joined the staff of Bobbink & Atkins, traveling as far as Minneapolis and New Orleans and visiting nurserymen and greenhouse operators. He took charge of correspondence and other duties in the office at East Rutherford in 1933. Two years later he married Mr. Bobbink's only daughter. Since the incorporation of the firm, in 1939, Mr. White has been its vice-president and treasurer.

Paper presented by George White, Bobbink & Atkins, East Rutherford, N. J., before the annual meeting of the New Jersey Association of Nurserymen. Mr. White wishes to acknowledge the help of reports by several research workers which appeared in recent issues of the Journal of Economic Entomology.

# Colorado Trade and Amateurs Meet

By George W. Kelly

If a bomb had been dropped in the right (or rather wrong) place in Denver, February 24, it would have wiped out almost all the horticulturally minded people of the state of Colorado. For they were all in Denver at that time attending meetings of the Colorado Nurserymen's Association and the Colorado Forestry and Horticulture Association.

Thirty nurserymen, including several from Nebraska, met at 10 a. m., in the Rose room of the Albany hotel. The first business was the election of officers for 1945. Maurice Marshall, of Marshall's Nurseries, Denver, was elected president; Scott Wilmore, of W. W. Wilmore Dahlia Farm & Nursery, Denver, vice-president, and Mrs. Mary Ellen Maroney, of Marshall's Nurseries, secretary-treasurer.

There was considerable discussion as to the proper relation between the Colorado Nurserymen's Association and the new Colorado chapter of the American Association of Nurserymen. It was finally decided to maintain separate organizations, so that it would not be necessary for all to be members of both organizations. It was found that almost everyone was actually a member of both; so the same officers were elected to serve for the A. A. N. chapter. Four directors were also elected for the A. A. N. chapter. These were R. J. Curry, Fort Morgan Nursery, Fort Morgan; D. W. Spangler, St. Vrain Valley Nursery, Longmont; Ray Williams, Williams Gardens, Greeley, and George W. Kelly, Arapahoe Acres Nursery, Littleton. Scott Wilmore was elected delegate to the national convention, with Clayton Watkins, Fort Collins Nursery, Fort Collins, his alternate.

Several out-of-state visitors, including Lloyd Moffet, Plumfield Nurseries, Fremont, Neb.; Chester G. and Vernon Marshall, Marshall's Nurseries, Arlington, Neb., and Leroy Gates, state entomologist, Lincoln, Neb., were asked to talk about general nursery conditions for a few minutes, and then luncheon was served. Afterward, Mr. Gates and Mr. Newton, state entomologists, showed colored movies of various serious insect pests in the state.

The second annual meeting of the Colorado Forestry and Horticulture Association opened at 2 p. m., in Humphreys Memorial Hall, Denver, February 24. There was a brief busi-

ness meeting, including reports of the officers and the passing of a resolution to provide for three more directors.

The new board of directors met and approved the recommendations of the nominating committee for 1945 officers. Those reelected were Mrs. John Evans, president; Fred Johnson, secretary, and S. R. DeBoer, M. Walter Pesman, Robert E. More and Mrs. George H. Garrey, vice-presidents. Leonard G. Shoemaker was elected treasurer. Mr. Shoemaker will also act as assistant secretary, with regular office hours to handle the large amount of detail work of this fast-growing organization.

The president announced that in the past year the membership has grown from less than 100 to more than 1,000.

Irvin J. McCrary, landscape architect, was chairman of the afternoon program and introduced, as the first speaker, William E. Gunesch, soil expert for the Park-Elitch Co. In discussing "The Problem of Soil Aeration," Mr. Gunesch brought out the fact that the texture and structure of the soil governed the amount of moisture and air that the soil contained. He said that different crops required varying proportions of air and water, but that, in general, the problem was so to handle the soil that it would contain a maximum amount of water without excluding too much air. He strongly advocated the application of decomposing vegetable matter to help achieve this desirable condition. He also suggested other mechanical methods of improv-

ing the soil aggregation and recommended where possible to plant certain cover crops whose roots tended to improve the physical condition of the soil.

William A. Kreutzer, of the botany department of Colorado State College, Fort Collins, spoke on "The Fundamental Causes of Plant Diseases." In an interesting manner, he described the different kinds of diseases and told how to ascertain the cause of the trouble. He explained how to identify the damage caused by bacteria, fungous growths, nematodes, insects, viruses and mineral salts. He recommended some cures for diseased plants, but suggested that the most important thing was prevention. Prevention included the selection of clean stock to begin with, the treatment of suspected seeds or bulbs, the disinfection of disease-filled soil, proper cultural practices, sanitation and the application of insecticides and fungicides.

The third and last speaker of the afternoon was George W. Kelly, of Arapahoe Acres Nursery, Littleton, who spoke on "What We Grow in Colorado and Why." He spent much time telling the "why"; so he could hit only briefly on the "what." It was brought out that Colorado has many peculiar horticultural problems and that growers in the state are only just beginning to realize this fact and to provide horticultural literature and scientific experiments to determine correct plants and practices for this climate. Mr. Kelly warned the nurserymen that it was time for them to quit trying to compete with some of the horticultural achievements of other states and to develop the outstanding horticultural possibilities that they have at home. Examples were given of plants which various sections of the state might well emphasize.

The evening session was held at Daniels & Fisher's tearoom. About 200 persons attended this session, at which Clayton Watkins, of the Fort Collins Nursery, presided. After a fine turkey dinner and a review of the afternoon program by Mr. Watkins, he presented Mrs. Helen Fowler, of Shadow Valley Gardens, Wheat Ridge, who alone had been responsible for bringing in over \$1,000 in membership dues. The association presented her with an orchid to show its appreciation. She was so enthusiastic about the possibilities in the development of this organization that



Maurice N. Marshall.

# WHOLESALE PRICE LIST **SPRING 1945**

## WOOD-HOWELL NURSERIES, INC.

Telephone  
1784-R

Lee Highway, BRISTOL, Va.

Owen G. Wood,  
President

We offer the following list of well grown plant material with confidence that it will please. We have many additional items in small quantities which do not appear in the following list and which we shall be glad to quote upon request.

### CONIFEROUS EVERGREENS-B&B

<b>ABIES concolor</b> , Concolor Fir	Each
75 4 to 5 ft.	\$5.00
75 5 to 6 ft.	6.00
50 6 to 7 ft.	7.50

<b>CHAMAECYPARIS pisifera plumosa aurea</b> , Goldplume Cypress	
100 2½ to 3 ft.	1.50
100 3 to 4 ft.	2.00
75 4 to 5 ft.	2.50

<b>pisifera squarrosa veitchii</b> , Silver Moss Cypress	
100 18 to 24 ins.	1.00
125 24 to 30 ins.	1.25
50 2½ to 3 ft.	1.50

<b>JUNIPERUS chinensis excelsa stricta</b> , Spiny Greek Juniper	
750 2 to 3 ft.	1.50
650 3 to 4 ft.	2.00
25 4 to 5 ft.	3.00

<b>chinensis pfitzeriana</b> , Pfitzer Juniper	
1100 16 to 18 ins.	1.00
1800 18 to 24 ins.	1.25
750 24 to 30 ins.	1.50
450 2½ to 3 ft.	2.00
50 3 to 3½ ft.	2.50
300 3½ to 4 ft.	3.50
300 4 to 5 ft.	4.00
50 6 to 6 ft.	5.00

<b>communis ashfordii</b> , Ashford Juniper	
300 2 to 3 ft.	1.25
150 3 to 4 ft.	1.75

<b>communis hibernica</b> , Irish Juniper	
500 18 to 24 ins.	.75
500 2 to 3 ft.	1.00
700 3 to 4 ft.	1.25
450 4 to 5 ft.	1.50

<b>horizontalis plumosa</b> , Andorra Creeping Juniper	
150 18 to 24 ins.	1.00
250 2 to 3 ft.	1.25
350 3 to 4 ft.	1.50

<b>sabina</b> , Savin Juniper	
50 16 to 18 ins.	.75

<b>PINUS montana mughus</b> , Mugho Pine	
150 16 to 18 ins.	1.25
100 18 to 24 ins.	1.50
25 3 to 4 ft.	3.50

<b>strobus</b> , White Pine	
1000 2 to 3 ft.	.75
1000 3 to 4 ft.	1.25
1000 4 to 5 ft.	2.00
1000 5 to 6 ft.	2.50
1000 6 to 7 ft.	3.50
1000 7 to 8 ft.	4.00
1000 8 to 9 ft.	4.50
1000 9 to 10 ft.	5.00

<b>THUJA occidentalis globosa</b> , Globe Arborvitae	
100 12 to 15 ins.	.75
100 16 to 18 ins.	1.00

<b>occidentalis plicata pyramidalis</b> , Fernleaf Arborvitae	
50 2½ to 3 ft.	1.50

<b>occidentalis pyramidalis</b> , Pyramidal Arborvitae	
100 2½ to 3 ft.	1.50
100 3 to 3½ ft.	1.75
50 3½ to 4 ft.	2.00

<b>orientalis bakeri</b> , Baker Green Arborvitae	
25 8 to 4 ft.	1.50

<b>TSUGA canadensis</b> , Canada Hemlock	
1500 18 to 24 ins.	1.25
500 2 to 3 ft.	1.75

<b>caroliniana</b> , Carolina Hemlock	
100 18 to 24 ins.	1.25
100 24 to 30 ins.	1.50
50 2½ to 3 ft.	2.00
25 3 to 3½ ft.	2.50

### BROAD-LEAVED EVERGREENS-B&B

<b>AZALEA calendulacea</b> , Deciduous Flame	Each
400 2 to 3 ft.	\$2.00
500 3 to 4 ft.	2.50
100 4 to 5 ft.	3.50
50 5 to 6 ft.	4.00

<b>Yodogawa</b> (flowers purplish-lavender)	
50 2 to 2½ ft.	2.50

<b>BUXUS sempervirens</b> , Boxwood	
50 15 to 18 ins.	1.50
200 18 to 24 ins.	2.00
200 2 to 2½ ft.	3.00
100 2½ to 3 ft.	4.00

<b>KALMIA latifolia</b> , Mountain Laurel	
500 24 to 30 ins.	1.50

<b>LEUCOTHOE catesbaei</b> , Drooping Leucothoe	
50 18 to 24 ins.	1.25
50 24 to 30 ins.	1.50

<b>MAHONIA aquifolium</b> , Oregon Hollygrape	
200 15 to 18 ins.	1.00
100 18 to 24 ins.	1.25

<b>RHODODENDRON catawbiense</b> , Catawba Rhododendron	
200 18 to 24 ins.	1.10
200 24 to 30 ins.	1.35

<b>maximum</b> , Rosebay Rhododendron	
100 24 to 30 ins.	1.25

<b>VIBURNUM rhytidophyllum</b> , Evergreen Snowball	
100 2 to 3 ft.	1.75
100 3 to 4 ft.	2.25

### FLOWERING SHRUBS

<b>BUDDLEIA de France</b> , Butterfly Bush	Each
250 2-yr.	\$0.25

<b>CYDONIA japonica</b> (Chaenomeles), Spreading-type Flowering Quince	
500 18 to 24 ins.	.25

<b>FORSYTHIA intermedia</b> , Border Forsythia	
200 2 to 3 ft.	.25
200 3 to 4 ft.	.30
200 4 to 5 ft.	.35

<b>suspensa</b> , Weeping Forsythia	
100 3 to 4 ft.	.30

<b>viridissima</b> , Greenstem Forsythia	
50 2 to 3 ft.	.25

<b>HIBISCUS syriacus</b> , Althaea, Double White	
100 2 to 3 ft.	.20

<b>LIGUSTRUM pendulum</b> , Weeping Privet	
150 4 to 5 ft.	.40

<b>LONICERA tatarica</b> , Tatarian Honeysuckle	
300 5 to 6 ft.	.35

<b>tatarica rosea</b> , Pink Tatarian	
100 3 to 4 ft.	.30

### Flowering Shrubs—Continued

<b>RHUS canadensis</b> (aromatica), Sumac	Each
200 2 to 3 ft.	\$0.30
300 3 to 4 ft.	.35

<b>SPIRAEA Anthony Waterer</b>	
350 15 to 18 ins.	.30

<b>arguta</b> , Garland	
500 3 to 4 ft.	.35

<b>trichocarpa</b> , Korean	
200 2 to 3 ft.	.25
100 3 to 4 ft.	.30

<b>vanhouttei</b> , VanHoutte	
250 2 to 3 ft.	.20
400 3 to 4 ft.	.25

<b>SYRINGA persica</b> , Persian Lilac	
50 2 to 3 ft.	.30

<b>VIBURNUM americanum</b> , American Cranberry Bush	
200 2 to 4 ft.	.35

<b>WEIGELA rosea</b> , Rose Weigela	
300 2 to 3 ft.	.20
500 3 to 4 ft.	.25
200 5 to 6 ft.	.40

<b>ALBIZZIA julibrissin</b> , Mimosa	
200 4 to 5 ft.	.30

<b>CERCIS canadensis</b> , American Redbud	
200 2 to 3 ft.	.30
100 3 to 4 ft.	.40

<b>CORNUS florida rubra</b> , Pink-flowering Dogwood	
250 3 to 4 ft.	1.50
250 4 to 5 ft.	2.50
250 7 to 8 ft.	5.00

<b>KOELREUTERIA paniculata</b> , Golden-rain Tree	
50 3 to 4 ft.	.50

<b>PLATANUS occidentalis</b> , American Plane Tree	
75 10 to 12 ins., B&B.	2.00
25 12 to 16 ins., B&B.	2.50

<b>SALIX babylonica</b> , Babylon Weeping Willow	
25 6 to 7 ft.	.75

### COLLECTED STOCK-B&B

Any Quantity

<b>RHODODENDRON catawbiense</b> , Catawba	Each
2 to 3 ft.	\$1.50
3 to 3½ ft.	1.75

<b>maximum</b> , Rosebay	
2 to 3 ft.	1.15
3 to 4 ft.	1.45

<b>KALMIA latifolia</b> , Mountain Laurel	
18 to 24 ins.	.90
24 to 30 ins.	1.00
30 to 36 ins.	2.00



she found but little time to talk about her assigned subject, "Continuous Bloom for Colorado Gardens." Mrs. Fowler did go through the months from spring to fall and mention those plants which nurserymen could expect to give a maximum showing of color in Colorado. She suggested that the show start in April with daffodils. In May there would be tulips, followed by arabis, alyssums and iberis, and then bleeding hearts, anchusas, trolius, Phlox subulata and Iris pumila. June would be brightened by delphiniums, lilies, Canterbury bells and pink sedums. July is the weak month in Colorado and has few conspicuous flowers. In August the boltonias, bocconias, Michaelmas daisies and fall chrysanthemums would appear.

Robert E. Ewalt spoke on "Quality Peaches for Denver Home Gardens." Mr. Ewalt is an amateur with a small back-yard garden, but he has tried out many plants, especially fruits, and the results of his experiments were most interesting. He said that even though Colorado could expect a crop of peaches less than once in three years in protected places, it was still well worth the expense and effort.

John W. Spencer, regional forester of the United States Forest Service, spoke on "Colorado Forests and Watersheds." He gave much data regarding the areas of the forests in the state under various ownership and their value to the state. He brought out the fact that privately owned forests could never be profitable and since water is our economic lifeblood, the water collecting and conserving value of most of our forests was greater than the timber value. Mr. Spencer showed that by proper handling grazing lands and forest lands could be made to produce a maximum amount of value from the forage and timber and at the same time provide more usable water.

Following Mr. Spencer's talk, everyone was keyed up to a high degree of excitement in anticipation of the announced appearance of the mysterious "Quercus." A place had been reserved at the banquet table with a place card marked for him, but it was not until Mr. Watkins called for his talk that he appeared. He came in dressed in a "monkey suit" of green silk and wearing a clown's false bald head and a long set of red whiskers. He proceeded to read a prepared talk about "Frustrated Hydrangeas," in which he managed to get in a great many digs at some of the prominent people present. Then, while all sat around

stunned by his wit, he disappeared again, with no one the wiser as to his identity.

The opinion of many who attended this series of meetings was that the work of the Colorado Forestry and Horticulture Association and its publication "The Green Thumb" were of greater value to the horticultural development of the state than anything that has been attempted before.

### CONTROL JAP BEETLE IN ILLINOIS.

Since the Japanese beetle first made its appearance in Illinois in 1934, when six adult beetles were taken in traps in the city of Chicago, a control program to keep the pest in check has been carried out by the Illinois state department of agriculture, in cooperation with the federal bureau of entomology and plant quarantine and, more recently, with the Chicago park system. Control has been accomplished by trapping operations, soil-treating work and quarantine enforcement.

A table recently prepared, showing the results of trapping operations carried on in the state since 1934, indicates the effective results. In Chicago, the site of heaviest infestation, as the crossroads of the railroad transportation systems of the country, the high point was reached in 1936, when 3,740 beetles were captured. In succeeding years the figure dropped immediately to ten per cent of that number and down to 170 in 1942, increasing to 708 in 1944, when

9,500 traps were set. Other important cities of the state have shown no infestation, with the exception of a half-dozen localities where occasionally a few beetles have been found, chiefly in the suburbs of Chicago. The largest infestation was in the private estate area of Highland Park, where 5,608 beetles were gathered in 1,100 traps in 1941. Prompt treatment reduced that infestation and in 1944 only ten beetles were captured in 500 traps.

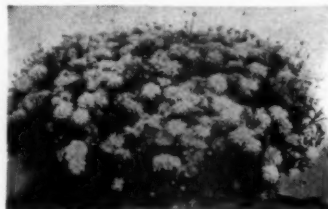
Lead arsenate treatment of the soil has been practiced in infested areas, the insecticide being sprayed on the ground at a rate of 500 pounds per acre and then thoroughly washed into the soil with clear water.

Areas in which Japanese beetles have been found are placed under quarantine. This does not mean that the movement of plant material from such quarantined areas is prohibited, but all shipments originating in the infested areas must meet certain requirements and must be moved under state certification. The quarantined areas to date have contained no commercial nursery of importance.

Soil-treating operations have been carried on since 1936, the total acreage treated to date being 1,281.4. Most of this acreage has been in Chicago, the number of acres treated ranging from approximately 100 each year to 203.5 in 1944. In East St. Louis six acres were treated in 1939 and nine and one-half acres in 1943. In Evanston nineteen and one-fifth acres were treated in 1937 and three in 1939. In Highland Park seventy-seven and three-tenths acres were treated in 1941, twenty acres in 1942

## NEW SUMMER-FLOWERING MUMS

- \*Flowers from early August to heavy frosts.
- \*Large, perfectly formed, double blooms.
- \*Excellent cut flowers—beautiful colors—clean foliage.
- \*Very hardy—easy to grow.



A 2-yr. plant of My Lady  
Hundreds of blooms

Please—no orders for less than 25 of one variety. (25 at 100 rate.)

### Rooted Cuttings

<b>DEAN KAY IMPROVED.</b>	Per 100
Lovely rose-pink	\$12.00
<b>DEAN LADD.</b> Beautiful	
bronze-red	12.00
<b>MY LADY.</b> Exquisite	
orange-yellow	12.00
<b>UNIVERSITY OF MINNESOTA</b>	
<b>VARIETIES:</b>	
<b>CHIPPEWA.</b> Magnificent	
aster-purple	15.00
<b>REDGOLD.</b> Bright scarlet	
Pompons	12.00
<b>REDWING.</b> Fine Pompeian-	
red	12.00
<b>SUNRED.</b> Like Chippewa,	
but bright red.	12.00
<b>WELCOME.</b> Unusual	
mallow-purple	12.00

**CORLISS BROS. Inc., NURSERIES**

301 Reynard Street

GLOUCESTER, MASS.

and twenty-eight and one-third in 1943.

By these control activities the state authorities have kept the Japanese beetle from becoming a pest of importance in Illinois, so that the operators of nurseries and greenhouses are able to move their products freely, those in the small isolated infested areas in compliance with the quarantine regulations under state supervision and certification.

### CATCHES ESCAPED NAZIS.

Robert McIntyre, operator of the McIntyre Nurseries, Nashville, Tenn., captured three of four fugitive German prisoners of war on February 21, a week after they had escaped from Fort Knox, Ky. The fourth prisoner, deserted by his comrades when he became ill, was captured two days before at Nashville.

Mr. McIntyre was working in his greenhouses when his wife told him that the sheriff had just called to ask if they had seen any of the three men answering the descriptions of the prisoners. Believing he might find the fugitives in an old hobo hide-out, Mr. McIntyre armed himself with his .38-caliber revolver that he had used as a city policeman five years before and, with his wife and dog close behind, surprised the three war prisoners, dressed in the full uniforms of German paratroopers, as they huddled in the hide-out at the railway underpass near the nurseries. He said that he "lived more excitement in the twenty minutes it took him to capture the Nazis than I lived during the five years of police work."

Mr. McIntyre took over the McIntyre Nurseries nearly five years ago. He devotes some of the acreage to growing tomatoes and is doing a good job with his crops, as well as capturing Nazis.

### DALLAS MEETING.

The Dallas Nurserymen's Association met at the Texas Nursery, Dallas, Tex., February 6, with President E. E. Leverett in the chair. Secretary-treasurer Mrs. John Sarver reported the recent addition of several new members. Henry Schaeffer, of the Lang Floral & Nursery Co., presented Otto Lang's invitation to hold the next meeting at Lang's Ross avenue greenhouses. There was some discussion of meeting next in April, but possibilities of peace and a statewide gathering of nurserymen here in August led to a decision to meet the second Tuesday night in March at Lang's.

## SURPLUS

We have the following stock in storage which we offer at wholesale prices as long as it lasts. Orders will be filled in rotation—first come, first served. We offer, in addition to this list, shade trees in field, particularly Sugar Maple and Budded Elm, Moine, Vase, Minneapolis and Lake City Elm. Also a fair surplus in Evergreens such as Colorado Spruce, Savin Juniper, Siberian Arborvitae, Globe Arborvitae, Pyramidal Arborvitae, Scotch Pine, 4 to 6 ft., specimen stock; American Arborvitae, etc. Write for prices.

### APPLE

	11/16-in.	9/16-in.
Delicious	300	300
Duchess	300	...
McIntosh	100	100
N. W. Greening	100	100
Wealthy	200	...
Flame	200	70
Hopa Crab	300	50

### SHRUBS

	18 to 24 ins.	2 to 3 ft.	3 to 4 ft.	4 to 5 ft.
Butterfly Bush	500	500	...	...
Dogwood, Siberian	500	500	...	...
Variegated	200	100	...	...
Honeysuckle, Pink Tartarian	500	...	...	...
Red Tartarian	500	100	...	...
Morrowi	100	100	...	...
Hydrangea, Arborescens	500	1200	...	...
P. G.	300	800	...	...
Lilac, Common White	200	100	30	...
Common Purple	100	100	50	...
Persian Purple	100	1000	400	...
Lilac, French	...	...	...	...
Charles X.	200	100	30	...
Congo	100	40	...	...
Ludwig Spaeth	100	100	30	...
Mme. Lemoine	50	100	30	...
Mme. Perle	25	100	25	...
Marie Legraye	25	75	30	...
President Grey	75	40	10	...
Snowberry, Red	100	100	...	...
White	...	400	100	...
Spiraea froebell	1000	800	...	...
Vanhouttei	1000	1000	200	...
Syringa Coronarius	100	100	100	100
Lemoinei	100	100	...	...
Virginalis	100	200	50	...

### TREES

	3 to 4 ft.	4 to 5 ft.	5 to 6 ft.	6 to 8 ft.	8 to 10 ft.	10 to 12 ft.	12 to 14 ft.	14 to 16 ft.	16 to 18 ft.	18 to 20 ft.
White Birch	100	100	100	100	100	100	100	100	100	100
Catalpa Speciosa	100	700	500	1000	500	...	...	...	...	...
Lombardy Poplar	1 1/4	1 1/4	1 1/4	2	2 1/4	2 1/4	2 1/4	3	3 1/2	3 1/2
American Elm	200	400	250	130	65	130	50	50	15	...
Ash	100	200	238	...	...	...	...	...	...	...
Moline Elm	20	20	25	20	...	...	...	...	...	...
Sugar (Hard) Maple	4	5	6	8	10	12	14	16	18	20
Soft Maple	...	...	...	...	...	...	...	...	...	...
Mountain Ash	...	...	...	...	...	...	...	...	...	...
European	...	80	...	180	...	...	200	80	...	...
Noble Weep. Willow	100	80	100	200	200	...	...	100	...	...
Wisconsin Weeping	...	...	...	...	...	...	...	...	...	...
Willow	...	...	60	10	...	...	...	...	...	...
Black Walnut	...	50	100	80	10	...	...	...	...	...

### SEEDLINGS

	8 to 12 ins.	12 to 18 ins.	18 to 24 ins.	2 to 3 ft.	3 to 4 ft.	4 to 5 ft.	5 to 6 ft.	6 to 8 ft.
Barberry, thunbergi	1000	1000	1000	1000	1000	1000	1000	1000
Prunus Tomentosa	...	...	100	100	100	...	...	...
Russian Olive	1,000	1,000	...	...	...	...	...	...
Chinese Elm	2,000	2,000	1,000	...	...	...	...	...
Cottonwood	...	...	5,000	10,000	...	...	...	...
Ginnala Maple	...	...	300	200	100	50	...	...
Willow, Golden	...	10,000	10,000	10,000	...	...	...	...
Laurel-leaved	...	10,000	10,000	10,000	...	...	...	...
White	...	...	2,000	8,000	...	...	...	...

## CASHMAN NURSERIES, INC.

M. R. Cashman, Mgr.

Owatonna, Minn.

### FOR WHOLESALE SURPLUS PRICE LIST OF HIGH QUALITY

## EVERGREENS, FLOWERING CRABS, SHRUBS, TREES, ROSES AND PEACH TREES

See February 15 issue of American Nurseryman.

THE HOWARD-HICKORY CO.

Hickory, N. C.

## OBITUARY

### John K. Andrews.

John K. Andrews, partner in the Andrews Nursery Co., Faribault, Minn., and prominent in trade organization work for many years, died February 27. He was 62 years old and had been in poor health for several years.

Mr. Andrews, son of Mr. and Mrs. John P. Andrews, early settlers at Faribault, was born November 15, 1883, at the old Andrews homestead opposite the nursery office and grounds. He was graduated from the Faribault high school and from the University of Minnesota college of agriculture, majoring in horticulture.

In 1918 the management of the Andrews Nursery Co., founded in 1872 by his father, was taken over by John K. Andrews and his two brothers, Howard and Rufus. Four years ago, Kimball and Dixon, his sons, also became partners in the firm.

Mr. Andrews served two years as president of the Minnesota Nurserymen's Association, was a board member of the Minnesota Fruit Growers' Association and an honorary member of the Minnesota Horticultural Society. He was also prominent in work of the American Association of Nurserymen and for the past ten years had been on the legislative committee of the state association. Also active in community projects at Faribault, Mr. Andrews was president of the Chamber of Commerce.

Besides his widow, Mrs. Helen Dixon Andrews, Mr. Andrews is survived by two sons, Kimball and Dixon; two brothers, Howard and Rufus, and three sisters, Mrs. Grace A. Gorham, St. Paul; Mrs. Eleanor E. Weston, Santa Cruz, Cal., and Miss Lulu Andrews, Faribault.

### Michael H. Horvath.

Michael H. Horvath, dean of American rose hybridizers, died February 16, in Florida. The first to begin the orderly exploration of American wild species for the production of roses that are hardy in different sections of North America, he had devoted more than fifty years to the successful hybridizing of rose plants.

In 1893, while employed by the Newport Nursery Co., Newport, R. I., Mr. Horvath first saw the rose wichuraiana. Although disappointed with its meager blooms, he was so impressed with its wonderful foliage



John K. Andrews.

that he made it the subject of experiments from which resulted Manda's Triumph, Universal Favorite, Pink Roamer and South Orange Perfection. These were introduced by W. A. Manda, South Orange, N. J., in 1898 and 1899 and exhibited by him with much success at the first show of the American Rose Society, in 1900, at New York city.

Mr. Horvath operated his own establishment at Glenville, O., and later at Mentor, O. In 1900 he demonstrated his experiments in hybridizing to one of the Barbier brothers, well known nurserymen of Orleans, France, and thereby became responsible for the hybridizing that soon was under way in that country.

In the years following Mr. Horvath made many successful crosses

resulting in such hybrids as Lady Alice Stanley, Mrs. Frank F. Prentiss, Federation, Pink Profusion, Mable Stearns, Dooryard Delight, Mrs. F. B. Stearns. His excellent Treasure Island climbers, Doubloon, Captain Kidd, Jean Lafitte and Long John Silver, brought him the title of "father of the climbing rose." Doubloon was the most successful of them all and was awarded the David Fuerstenberg prize in 1936.

At one time Mr. Horvath held an important position at Cleveland, serving as designer and adviser to the old park board and as city forester under Mayor Tom L. Johnson. Although he planned to remain with the city parks system, politics became so distasteful to him that he left public life to return to his roses. One daughter survives.

### Arthur L. Norton.

Arthur L. Norton, who operated the Arthur L. Norton Nurseries, Clarksville, Mo., died February 20. In 1913, Mr. Norton sold a half interest in the nurseries to U. E. Thurmond and the business was conducted as Norton & Thurmond for a time.

### Frank H. Coon.

Frank H. Coon, of Farmington, Mich., died February 8, following an extended illness.

Mr. Coon was born December 31, 1870, at Greenfield, Mich., and went to Farmington twenty-five years ago. He and his son, Walter M. Coon, established the Farmington Gardens Nursery in 1927. The business is

## TEAS' WEeping MULBERRY

A fine lot of trees with heavy, well branched 1-yr. heads and strong 5 to 6-ft. stems.

**\$12.50** per 10

**\$110.00** per 100

## BRYANT'S NURSERIES

PRINCETON

Established 1845

ILLINOIS

## JEWELL

## MORDEN'S HARDY LYTHRUM

Useful cut flower.

Hardy, rose-pink, border perennial that blooms from June to September.

Field-grown, No. 1

**\$2.00** per 10

**\$18.00** per 100

## JEWELL NURSERIES, INC.

Lake City,

Box 457

Minnesota



being carried on by Walter Coon, who is president of the Michigan Association of Nurserymen.

### CATALOGS RECEIVED.

Mount Arbor Nurseries, Shenandoah, Ia.—Spring wholesale trade list of general nursery stock and supplies, 64 pages, 6x9 inches.

Jackson & Perkins Co., Newark, N. Y.—Wholesale spring price list of nursery stock, 32 pages, 5½x8 inches.

Bristol Nurseries, Inc., Bristol, Conn.—Spring retail catalog of chrysanthemums, roses, lilies, weigela and grass seeds, with colored illustrations and descriptions, 20 pages, 8½x11 inches.

Jewell Nurseries, Inc., Lake City, Minn.—Wholesale spring price list of nursery stock, 16 pages and cover, 4x8¾ inches.

Hillenmeyer Nurseries, Lexington, Ky.—Retail folder of fruit trees, berry plants, etc., illustrated in color, 4¼x9½ inches folded.

J. V. Bailey Nurseries, St. Paul, Minn.—Retail spring catalog of nursery stock, illustrated in color, 32 pages, 6½x9¾ inches.

E. D. Robinson, Wallingford, Conn.—Spring surplus lists of shrubs and lining-out stock, in folder form.

Corliss Bros., Inc., Gloucester, Mass.—Spring wholesale price list of chrysanthemums and perennials, 6-page folder 4¼x9¾ inches.

Inter-State Nurseries, Hamburg, Ia.—Retail spring catalog of nursery stock, seeds, bulbs and supplies, illustrated in color, 80 pages, 7½x10¼ inches.

Stern's Nurseries, Geneva, N. Y.—Retail spring catalog of fruit trees, berry plants, shrubs and trees, 24 pages and cover, 6x9 inches.

C. C. Breece, Delaware, O.—Chrysanthemum catalog, 12 pages, 5x9¼ inches.

Atlantic Nurseries, Inc., Berlin, Md.—Spring surplus list of lining-out stock and vines, 8-page folder, 3½x8½ inches.

Snyder Bros., Inc., Center Point, Ia.—Retail spring catalog of nursery stock, 32 pages and cover, 5½x8½ inches.

N. A. Hallauer, Webster, N. Y.—Retail price list of hardy herbaceous and alpine plants, dwarf shrubs and bulbs, 16 pages and cover, 4x8¾ inches.

Keith Plant Nursery, Sawyer, Mich.—Catalog of blueberry and raspberry bushes, strawberry plants and garden roots, illustrated, 24 pages, 6x9 inches.

Thomas B. Meehan Co., Dresher, Pa.—Spring wholesale price list of ornamental trees and shrubs, 4 pages, 5½x12 inches.

I. E. Ilgenfritz' Sons Co., Monroe, Mich.—Wholesale price list of ornamental shrubs, shade trees, evergreens, vines, fruit trees and small fruits, 36 pages and cover, 5x8 inches.

Le-Mac Nurseries, Hampton, Va.—Spring wholesale price list of azaleas, holly, boxwood, privet and osmanthus, 6-page folder, 4x9 inches.

Jackson & Perkins Co., Newark, N. Y.—Spring catalog of roses, perennials, fruits, flowering shrubs and vines, with descriptions, profusely illustrated in color, 48 pages, 9x11¾ inches.

Conard-Pyle Co., West Grove, Pa.—Spring catalog of Star roses and perennials, with descriptions and colored illustrations, 32 pages, 6½x9¾ inches.

# JUNE BUD PEACH

I have sufficient seed in ground to produce approximately a half-million

## June Buds

good land, highly fertilized and good budders.

*Would welcome a few substantial contracts for Fall delivery.*

## FARMERS WHOLESALE NURSERY

*Paul Patterson, Owner*

P. O. Box 34

Smithville, Tenn.

## FRUIT TREES

READY FOR IMMEDIATE SHIPMENT.

APPLE				NECTARINE			
	1½-in.	1½-in.	1½-in.	1½-in.	1½-in.	1½-in.	
	55c	45c	35c	55c	45c	35c	
Anoka .....	200	...	...	Hunter .....	100	60	60
Red Delicious .....	...	...	400				
Yellow Delicious ..	200	400	150				
Grimes Golden ...	50	80	...				
PEACH				CHERRY			
	1½-in.	2 to 3 ft.			1½-in.	1½-in.	
	35c	30c			70c	45c	
Red Haven .....	700	800		Black Tartarian .....	100	...	
J. H. Hale .....	1000	...		Napoleon .....	100	100	
				Windsor .....	...	100	

Please state whether to ship by express or freight. Also give shipping date. Unless otherwise instructed, we will make shipment upon receipt of order.

I. E. ILGENFRITZ' SONS CO.

Monroe, Mich.



## GROW XMAS TREES

We grow 14,000,000 Forest, Xmas Tree and Ornamental Seedlings Annually.

Write today for Complete List and Xmas Tree Growers' Guide.

MUSSER FORESTS, INC.

INDIANA, PENNA.

# Some Plants You Should Know

By C. W. Wood

Just before the war put an end to most horticultural pursuits in Europe, *Dracocephalum heterophyllum*, dragonhead, began to make its appearance in the European lists. We hope that we can begin to look for it again in a year or two after hostilities cease. This short note is for growers of rock plants who are on the lookout for the new and unusual, so that they will keep an eye open for a source of seeds. I once had some dragonhead seeds from an English correspondent, but lost them in the following way: New items that reach me, either in the form of seeds or plants, are generally grown in pots until their natures assert themselves. That practice is followed because it is easier to keep a plant under close observation when it is in a pot near eye level and reaction to changes in environment and treatment can be noted. In line with that practice, the dragonhead was kept in pots until it commenced to go back. Then it was planted in the open in a limy soil in full sun, a condition which I understood from Kingdon Ward's field notes on plants collected in 1933 was the plant's natural liking. There it thrived mightily and produced an abundance of pretty white flowers, large (two inches long) for the size of the plant, in August and September. It is quite prostrate. The flowering stems, of which there are many on a plant a foot across, are seldom over three or four inches tall. Unfortunately, it died the first winter it was in the open, and that was the end of the experiment until some stock again becomes available. I cannot think it was lack of hardiness, however, for Ward records it growing on windswept situations at 15,000 feet elevation.

## Mulleins.

Mulleins have, with some reason, a rather poor reputation among gardeners. In the first place, they are often monocarpic, which places them beyond the pale of ordinary gardens, because we seem incapable of enjoying a plant that has to be grown from seeds every year. Of course, mulleins usually see to it that we need not go to that work in their case. But that raises another objection in some quarters, for a majority of the kinds may make a nuisance of themselves by selfsowing too freely. In the face of the foregoing, I find several kinds are useful garden

plants. The reactions of visitors to my garden make me think that mulleins would be good items in the neighborhood nursery if one had small plants to sell when the older ones were showing what they can do in the way of making a show.

In addition to the named varieties of mulleins which have become prominent during recent years and have been commented upon in these columns during the past year, I should expect the following (all available in seeds in this country) to be attractive to buyers: *Verbascum willmottiae*, a tall (five feet) lovely white, large of flower; *V. nigrum*, a most useful plant of medium (two feet) stature, having yellow flowers with violet-colored centers (there is also a white form with the same violet center); *V. phoeniceum* hybrids, growing up to three feet tall in a wide range of shades from white through pinks, light to deep, to lilac and violet-purple, and *V. wardemanum*, with slender 3-foot spikes of deep purple flowers.

## Tradescantia.

Glancing over the 1945 catalogs as they come in, I am favorably impressed by the number of mail-order dealers who are listing tradescantias. That is as it should be, for there are few more satisfactory plants of long blooming habit which are so well adapted to American conditions. If one is to judge, however, from

correspondence with neighborhood growers, there are still many of them who do not realize the possibilities in these plants, especially the modern named varieties.

It makes little difference what has caused the awakened interest among those who keep their fingers on the plant-buying pulse—some say it comes from the introduction of several improved forms under varietal names—so long as the plants receive the attention that they deserve. And the fact remains that we have few plants of equal merit, including a long blooming season and perfect ease of culture. Take the named hybrid, Pauline, for instance. With flowers twice the size of the ordinary *T. virginiana*, a pleasing shade of pale rosy mauve and the summer-long blooming period of *virginiana*, it makes a plant of great garden merit. The same may be said of the entire set of hybrids, including Blue Stone, rich blue; Irish Prichard, large white, flushed blue and a blue center (a most unusual flower); James Crawford Weguelin, porcelain blue; Leonora, deep violet; Purple Dome, bright purple; James Stratton, blue-purple, lighter than the next preceding. They all grow up to eighteen inches in height and flower throughout much of the summer in almost any situation, be it dry or moist, sunny or partly shaded.

The growing of plants from seeds saved from these and other kinds of

## LINING-OUT STOCK — BARE ROOT

	Per 100	Per 1000
<i>Taxus cuspidata</i> , spreading 1 yr., tpl. cuttings, 6 to 9 ins.....	\$25.00	\$200.00
<i>Taxus hicksii</i> , upright 1-yr., tpl. cuttings, 6 to 9 ins.....	25.00	200.00

## SPECIMEN STOCK—Balled and Burlapped

<i>Taxus Cuspidata</i> , spreading		
12 to 15 ins.....	\$15.00	\$125.00
15 to 18 ins.....	20.00	175.00
18 to 24 ins.....	25.00	225.00
<i>Taxus hicksii</i> , upright		
15 to 18 ins.....	15.00	125.00
18 to 24 ins.....	20.00	175.00
<i>Taxus hatfieldi</i>		
12 to 15 ins.....	15.00	125.00
<i>Taxus intermedia</i>		
15 to 18 ins.....	20.00	175.00
18 to 24 ins.....	25.00	225.00
<i>Taxus repandens</i>		
12 to 15 ins.....	15.00	125.00
15 to 18 ins.....	20.00	175.00

## KOSTER NURSERY

Division of Seabrook Farms

Wholesale Nurserymen.

Bridgeton, N. J.

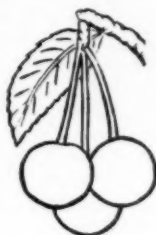
tradescantias is a delightful experience and in most cases would yield a rich harvest in salable plants. Seeds are available from commercial sources in case one has not saved his own. I speak from experience on that score, for I have tried growing them from seeds several times, always with satisfactory results. Out of the scores grown that way, few have been worthless as garden plants, although some showed their dwarf parentage by growing only six inches tall. The range of colors covers much the same as that of the named varieties mentioned. Here, apparently, is an easy and inexpensive way for the neighborhood grower to get some out-of-the-ordinary material.

#### Scabiosa Caucasica Blue Snowflake.

Although I am not ready to pass final judgment on *Scabiosa caucasica* Blue Snowflake, I can give a report on one summer's observations, and it was a poor summer in its dryness for all caucasica forms. First, though, let us examine the flower. The color, a soft pale blue, is not the best that one can find in the species, as it has a rather washed-out effect that does not add to its value. But that, so far as I have observed, is the only fault to be found with the plant. On the other side of the ledger will be found good size (three inches) of flower, long (two feet or perhaps longer in good heavy soil) stems, excellent substance, which adds to its value as a cut flower, and the usual long caucasica blooming season. If it stands the winters here in northern Michigan as well as it has stood those of Vermont, whence it comes, it should take its place among the better perennials of recent introduction. Its outstanding qualities, according to the introducer, are its permanence which springs from its ability to stand low temperatures and, what is of more importance to the warmer sections of the country, its constitution which permits it to laugh at hot weather as well. Growers in the hot belt will appreciate that characteristic.

#### Phlox Sir Edward Landseer.

It is not always the newest varieties of plants that are the best, as every experienced grower well knows. Often a glib tongue, a nimble mind and a little printers' ink can make us think something new is the best yet and, in the process of arriving at that conclusion, we are likely to forget or overlook some of our good old friends. That train of thought was started by the arrival of a 1945 catalog featuring one of my old phlox friends, Sir Edwin Land-



## FRUIT TREES

### Still Available

We have **SOUR CHERRIES, APPLES, and PEACHES** in limited quantities. Sold only in connection with a reasonable amount of other stock.

**SHRUBS  
SHADE TREES  
HEDGE PLANTS  
EVERGREENS  
PEONIES**

**VINES  
PERENNIALS  
BERRY PLANTS  
GARDEN ROOTS  
SEEDLINGS**

Send for new Spring Price List.

**THE WILLIS NURSERY CO.**

**Ottawa, Kan.**

## SURPLUS LIST

We have a few thousand **APPLE**, assorted varieties and grades.  
1-yr. whips, 18 ins. to 5 ft.

Also **JUNE BUD PEACH**, assorted varieties and grades.  
12 ins. to 9/16 to 11/16-in., 3 ft. and up.

Can also furnish the following **HARDWOOD CUTTINGS**

**Deutzia, Pride of Rochester  
Forsythia fortunei  
Intermedia Lonicera fragrantissima  
Privet, Amur River North**

#### LINING-OUT EVERGREENS

**Abelia grandiflora  
Cherry Laurel**

**Juniperus pfitzeriana  
Canadian Hemlock**

All nice, clean stock. Wire or write for quotations. See our 3-page advertisement in the February 15 issue of the American Nurseryman, or write for our Spring Trade List.

## FOREST NURSERY CO., INC.

**J. R. Boyd, Pres.**

**McMinnville, Tenn.**

## TAXUS

**100,000 for Spring Sales**

35,000 2-yr., in 2 1/4-in. rose pots.  
25,000 1-yr., in 2 1/4-in. rose pots.  
15,000 2, 3 and 4-yr., from the open field.  
25,000 from cutting bench.

**LEHIGH VALLEY NURSERIES  
1745 Linden St., Bethlehem, Pa.**

## LINING-OUT STOCK

Transplanted in field 3 yrs.  
**PFITZER JUNIPER** Per 100 Per 1000  
12 to 15 ins. .... \$40.00 \$350.00

**MUGHO PINE**  
6 to 8-in. spread. .... 15.00 100.00

**COLORADO BLUE SPRUCE**  
8 to 10 ins. .... \$25.00 200.00

Don't confuse this stock with bedded transplants of same grades. Positively no boxing. Shipped only on your truck or in carlots.

**GARDNER'S NURSERIES  
Rocky Hill, Conn.**



seer. It is true, as the catalog pointed out, that the individual flowers "are smaller than many new kinds," but it is equally true that the total effect of its bright red color compares favorably with the best of moderns. What I always liked about Landseer, however, was its cheerful disposition and sturdy constitution, which always made it "a consistently good performer under all conditions." If you have been having trouble with the more modern red phloxes, it may pay you to investigate Landseer.

#### Carex Fraseri.

The sedges are not, generally speaking, exciting garden plants, a fact that accounts, no doubt, for their almost entire absence from gardens. The absence of most kinds is, for obvious reasons, not greatly regretted, but when we overlook *Carex fraseri* we are missing something really good. It is easy to understand, however, why *C. fraseri*'s rare occurrence in nature has kept it hidden from all except the most curious. According to the books, it occurs only on certain mountains in Virginia, West Virginia, North Carolina and Tennessee and there it seems not plentiful; it took me several years to find a collector who knew it and where it grew.

*C. fraseri* makes a clump of strap-shaped leaves, nearly two inches in breadth and as much as two feet in length, reminding one of some of the tropical bromeliads. Being evergreen, that tropical growth would make it a year-around ornament in sections where snow does not cover it in winter. Here in northern Michigan it is one of the better ornaments for a shady spot from the passing of snow to its coming again the next winter, except that the leaves are often burned at their tips by the sun or wind, or both, between the time the snow melts and the leaves over its head come out. And then in spring (early May here) each clump sends up a number of flowering stems, from a foot to eighteen inches in length, bearing heads of creamy flowers, the upper portion being fuzzy with protruding stamens. All of these features make a lovely garden plant and one of great value because of its shade-loving nature. The books say it grows naturally in moist soil in shade, and no doubt that is where it would do best. In practice, however, it is found that it can get along quite well without an abundance of moisture, so long as it has a leafy soil and shade. I grew it and it prospered on the natural rainfall of this section. Although this must be close to the border line of its adaptability

to cold, it had endured many of our winters until it passed out a few years ago in a winter far less severe than many it had gone through. It makes me think, though, that some cause other than low temperature was at the base of it. It may be grown from divisions (it makes short rootstocks which eventually form a large clump) or from seeds, when available.

#### Cheiranthus Alpinus.

As seeds of this small crucifer are usually available in this country and the plant possesses much merit not recognized by gardeners, I believe *Cheiranthus alpinus* deserves a place in any enumeration of plants we should know. I like it particularly well because of its landscape value, especially when planted in association with blue flowers of its season. As I recall it now, though I do not find the reference at the moment, the idea of planting it in connection with blue-flowered plants came to me years ago from one of Gertrude Jekyll's books in which she spoke of its beauty when planted with *Lithospermum prostratum*. I cannot, because of too severe winters, keep the *lithospermum* for any length of time, but the association of the *cheiranthus* with other blue flowers of spring has given me not a little pleasure. Try it in your show garden for suggestive ideas for your customers.

*Cheiranthus alpinus* comes from Norway and Lapland, we are told, where it adds cheer to that bleak landscape by a prodigious production of pale yellow cross flowers soon after spring arrives. In gardens here we find it following its normal

course by lighting up the spring scene with its bright performance. It takes kindly to the climate of northern Michigan, asking for no more than ordinary care in our light sand, though it does not attain the stature of a foot ascribed to it in Bailey's *Cyclopedia*; rather it seldom exceeds half of that height here, but that does not detract from its value as a landscape plant.

#### Scabiosa Lucida.

So many of the scabiosas are either short-lived or have other faults that detract from their usefulness that I am always pleasantly surprised when I find one that puts on a long blooming performance during a long useful life. The foregoing can be ascribed to *S. lucida*, a mountaineer from Europe but not an alpine, as some would have it. Here it puts on one of the longest performances in the garden, commencing in June, as my records show, and continuing right up to, or near, the frost line. There would probably be days between these dates when a single plant would not show color, but a mass planting could be depended upon to have in bloom several of their medium-size lilac-blue pin-cushions, each on a foot-tall or taller stem. The color is pleasing and the plant is easily grown and long-lived.

### LINING-OUT STOCK AVAILABLE NOW

	Per 100
<i>Azalea mollis</i> (potted last fall).....	\$10.00
* <i>Cephalotaxus har. fastigiata</i> .....	12.50
<i>Deutzia gracilis</i> .....	10.00
<i>Hydrangea P.G.</i> .....	9.00
* <i>Ilex cornuta burfordi</i> .....	12.50
* <i>Pyracantha coccinea inlandi</i> .....	10.00
* <i>Pyracantha coccinea pauciflora</i> .....	12.50
<i>Taxus cuspidata capitata</i> .....	12.50
<i>Taxus brevifolia</i> .....	12.50
<i>Taxus intermedia</i> .....	12.50
<i>Taxus media hickoi</i> .....	12.50
* <i>Taxus media hatfieldi</i> (upright).....	12.50
<i>Welgela, Eva Rathke</i> .....	10.00

Orders must be for 50 or more of a variety except items marked \*, of which I have only a limited quantity. Less than 25 will be 1½¢ additional.

**THIS STOCK IS GROWN IN PLANT BANDS, AN IDEAL WAY TO HANDLE**

#### ARTHUR DUMMETT

61 W. Grand St. Mt. Vernon, N. Y.

#### CHARLES SIZEMORE Traffic Manager

319½ Georgia St., Louisiana, Mo.

Specializing in matters regarding the nursery industry of America.

Commercial collections.

Traffic matters before the Interstate

Commerce Commission.

Freight bills audited.

For 20 years secretary and traffic manager of the American Association of Nurserymen and well known to the nursery trade.

Reference: Bank of Louisiana, Mo.

### ACER PLATANOIDES NORWAY MAPLES

	Per 100	Per 1000
4 to 5 ft., trans.....	\$13.50	\$120.00
5 to 6 ft., trans.....	20.00	175.00
6 to 8 ft., trans.....	45.00	.....
8 to 8 ft., ¾ to 1-in. cal., whips, per 100,		
\$75.00, 8 to 10 ft., ¾ to 1-in. cal., well		
branched, per 10, \$10.00; per 100, \$85.00. 8 to		
10 ft., 1 to 1¼-in. cal., well branched, per 10,		
\$12.50; per 100, \$100.00.		

Free baling with cash with order. 25 per cent cash with order, balance must be paid before shipment. All trees are Jap Beetle Quarantine inspected.

#### STATE ROAD NURSERY

State and Sprout Rds., N. I Media, Pa.

#### "A friendly, efficient sales service"

#### E. D. ROBINSON

#### SALES AGENCY

38 So. Elm St. P. O. Box 285  
WALLINGFORD, CONN.

Representing

Adams Nursery, Inc.

Bristol Nurseries, Inc.

Barnes Brothers Nursery Co., Inc.

North-Eastern Forestry Co., Inc.

A. N. Pierson, Inc.

A complete line of well grown hardy plant material

Evergreens and Lining-out Stock

The lovely

Yellow

Rose

V for Victory

and other

## SUB-ZERO HYBRID TEAS

Large and beautiful as any.  
Easy to grow and long to live.  
Save replacement expense.  
Also Yellow and Orange Climbers.

Write for trade prices to

**BROWNELL ROSES**  
LITTLE COMPTON, R. I.



### LINING-OUT STOCK

**HYDRANGEA ARBORESCENS**  
**GRANDIFLORA**

5000 single shoot divisions,  
\$15.00 per 100, \$125.00 per 1000.

**RED JAPANESE MAPLE**

100 strong, 2-yr. grafts, bare root,  
10 to 15 ins., \$125.00 per 100.

**VIBURNUM DILATATUM**

3000 3-yr. sdgls., 18 to 24 ins.,  
\$60.00 per 1000.

**PICEA CONICA GLAUCA** (true dwarf Albertiana Spruce, grown from cuttings)

4-yr. tr., 4 to 6 ins.,  
\$45.00 per 100.

**TAXUS CUSPIDATA**, spreading

300 3-yr. tr., 8 to 12 ins.,  
\$30.00 per 100.

**TAXUS HATFIELDI**

500 4-yr. tr., 10 to 15 ins.,  
\$60.00 per 100.

**C. HOOGENDOORN**  
Turner Rd., Newport, R. I.

### LINING-OUT STOCK

**50,000 MUGHO PINE**

Transplanted in field 3 yrs.  
6 to 8-in. spread \$12.00 per 100.

Boxed in lots of 500 or more  
only. Send check to insure ex-  
press shipment.

**GARDNER'S NURSERIES**

Rocky Hill, Conn.

**PACHYSANDRA TERMINALIS**

	Per	Per
	100	1000
Assorted field.....	\$5.50	\$45.50
2 1/2 in., pot-grown.....	8.00	65.00

**HUGH B. BARCLAY**

1268 Montgomery Ave., Narberth, Pa.

We have a substantial surplus of ornamentals:

**SHRUBS, SHADE AND FLOWERING TREES**

Send your Want List for quotations.

**PONTIAC NURSERIES**  
Romeo, Mich.

### SOUTHWESTERN NOTES

Miss Jane Banta, daughter of Mr. and Mrs. J. C. Banta, Topeka, Kan., was married February 24 to Pfc. Donald Wright Selzer, son of Mr. and Mrs. Paul Selzer, Baldwin, Kan. The bride is a granddaughter of E. R. Taylor, of L. R. Taylor & Sons Nurseries, Topeka. Her parents are associated with Mr. Taylor in the business.

Lyle Hanes, formerly grower for the Willis Nursery Co., Ottawa, Kan., has entered the retail florists' business. Last fall he purchased the Romstedt Greenhouses, at Ottawa, and after renovating them, reopened for business March 1.

The Kansas City Association of Nurserymen held its monthly meeting February 20, at the Wagon Wheels restaurant. A chicken dinner served country style preceded the meeting, which was attended by sixteen members. J. Allison Denning, state entomologist of Missouri, was a guest and spoke informally on the latest developments in his field.

John Sarber, Jr., son of John Sarber, Sarber Nursery Co., Topeka, Kan., is a technical sergeant in the army, stationed at San Luis Obispo, Cal. Included in his duties are working on the camp newspaper and broadcasting.

O. P. M. Criley has moved his business, Criley's Perennial Garden & Nursery, from Ottumwa, Ia., to Eddyville, Ia.

### RED CROSS EXHIBIT.

In a Philippine jungle, reproduced with living plants in the New York Botanical Garden's conservatories, a Red Cross field station typical of the huts now used directly back of the battle lines in the Philippines has been erected as part of a special exhibit opened March 4 in the interest of the annual Red Cross campaign.

The first scene viewed is a 12-foot red cross made with 200 plants of a new blood-red azalea, named Lambertus C. Bobbink, set in a field of the pure white azalea, Snow. From behind the red cross, paths wind among the jungle trees into the Red Cross field station, then on through more of the tropical forest scenery, of the sort which has become familiar in recent weeks to thousands of our men in service. All of the azaleas in the display were contributed by Bobbink & Atkins.

EMIL A. WITTMAN is the successor to Robert Wayman, Clifton, N. J., who for years conducted a large mail-order plant business.

We Grow 14,000,000 Trees a Year



### SPRING OFFERINGS

#### TOP Quality STOCK

Left to right—3-yr. Special Colorado Blue Spruce; 3-yr. Canadian Hemlock; 3-yr. Special American Red Pine; 4-yr. Pyramidal Arborvitae; 4-yr. Norway Spruce.

S.—denotes Seedlings.

T.—denotes Transplants.

**PONDEROSA PINE**

	Per	Per
	100	1000
3-yr. S., (3-0), 4 to 5 ins. ....	\$3.00	\$15.00
4-yr. S., (4-0), 6 to 14 ins. ....	3.60	18.00

**SCOTCH PINE**

2-yr. S., (2-0), 4 to 6 ins. .... 6.00 ....

**AUSTRIAN PINE**

3-yr. S., (3-0), 6 to 12 ins. .... 6.00 ....

**WHITE PINE**

2-yr. S., (2-0), 2 to 4 ins. .... 3.00 15.00

3-yr. S., (3-0), 4 to 6 ins. .... 5.00 25.00

**BANKS PINE**

Fastest growing Christmas Tree

2-yr. S., (2-0), 4 to 10 ins. .... 3.00 15.00

(Best Planting Size for Banks)

**SPECIAL AMERICAN****RED PINE**

2-yr. S., (2-0), 2 to 4 ins. .... 2.40 12.00

3-yr. S., (3-0), 5 to 8 ins. .... 3.20 16.00

3-yr. T., (2-1), 3 to 5 ins. .... 8.00 40.00

(3-yr. stock recommended for Red Pine)

**NORWAY SPRUCE**

4-yr. T., (3-1), 3 to 8 ins. .... 10.00 50.00

**BLACK HILLS SPRUCE**

2-yr. S., (2-0), 2 to 3 ins. .... 2.40 12.00

3-yr. S., (3-0), 3 to 4 ins. .... 3.00 15.00

(3-yr. stock recommended for Black Hills Spruce)

**WHITE SPRUCE**

2-yr. S., (2-0), 2 to 3 ins. .... 2.40 12.00

6-yr. T., (3-2), 6 to 14 ins. .... 16.00 80.00

**SPECIAL COLORADO****BLUE SPRUCE**

2-yr. S., (2-0), 2 to 4 ins. .... 2.00 10.00

3-yr. S., (3-0), 3 to 5 ins. .... 3.60 18.00

4-yr. T., (2-1), 4 to 8 ins. .... 8.00 40.00

**BLUE SPRUCE**

4-yr. S., (4-0), 4 to 8 ins. .... 4.40 22.00

**CANADIAN HEMLOCK**

4-yr. S., (4-0), 6 to 12 ins. .... 8.00 ....

4-yr. S., (3-1), 6 to 8 ins. .... 10.00 ....

**CAROLINA HEMLOCK**

4-yr. S., (4-0), 6 to 12 ins. .... 8.00 ....

**DOUGLAS FIR**

2-yr. S., (2-0), 3 to 5 ins. .... 3.60 18.00

4-yr. S., (4-0), 6 to 10 ins. .... 5.00 25.00

**UPRIGHT and****SPREADING YEW**

5-yr. T., (4-1), 4 to 8 ins. .... 50.00 ....

**PYRAMIDAL ARBORVITAE**

4-yr. S., (4-0), 5 to 12 ins. .... 15.00 ....

**AMERICAN ARBORVITAE**

2-yr. S., (2-0), 2 to 3 ins. .... 4.00 20.00

**ORIENTAL ARBORVITAE**

4-yr. S., (4-0), 7 to 14 ins. .... 8.00 40.00

**BARBERRY**

2-yr. S., (2-0), 3 to 5 ins. .... 2.00 ....

3-yr. S., (3-0), 5 to 18 ins. .... 4.00 ....

WRITE TODAY  
FOR COMPLETE STOCK LIST

**MUSSER FORESTS, Inc.**

Indiana, Pa.

We Grow 14,000,000 Trees a Year

# This Business of Ours

*Reflections on the Progress and Problems of Nurserymen*

By Ernest Hemming

## CAPITAL.

These reminiscences are not intended for the old-time nurseryman who has been through several booms and depressions and has been struggling most of the time to keep his business going on borrowed capital, but rather for the young employee who has secret ambitions of going into business for himself if he can raise enough capital. It is this borrowed capital about which I am going to reminisce.

We are all so accustomed to using money as the only practical measure of value that we completely lose sight of other values. A nursery business founded on money or the profit idea alone is a poor investment as a life's work. The young nurseryman or florist who has dreams of going into business for himself probably would be more successful if he would completely eliminate from his mind the idea of borrowing capital and confine his thoughts to the idea of making the business produce its own capital, or perhaps we should say credit. Of course, it goes without saying that there must be capital in some form. The young man's ability to work, his knowledge, ability, imagination and what have you are all capital. It is the borrowed capital in the form of money that he should be slow to use. As soon as he does use it to any extent he ceases to be an independent businessman. In fact, he is in a worse position than when he had a boss because practically all the laws are made in favor of the lender.

It was once my good fortune to meet a unique character who gave me a new slant on money and business. The nursery and landscaping firm for which I was working at the time did a national business, and it was this company's custom to send its executives on a trip during the dull season to keep in touch with its customers and to go after new business.

The particular territory assigned to me on this occasion was North Carolina. A form letter was addressed to all the persons in that state listed in our index file telling them that I would be in their vicinity should they care to see me. According to the replies, an itinerary was laid out. Among the replies was a request to call on a John Patrick, of Esmerelde

Inn, near Chimney Rock, a place south of Asheville, in the Smoky mountains, a place so far out of the way and so unlikely a prospect for business that I was loath to make the call.

The firm lost money on that call, but I gained an education. A sleeper to Asheville, a local train to Rutherford, and then a 6 or 7-mile drive over the mountains by mule team landed me at the inn in a peculiarly mixed state of mind. Wonder at the beauty of the scenery and flora was mingled with resentment that anyone should request the call of a nursery landscape salesman to a place where the line he was selling was certainly in excess of everything else, especially money.

The inn was unique, evidently built to accommodate summer visitors, mostly from Cuba and other tropical countries. Inquiring at the inn for Mr. Patrick, I eventually located him on the grounds, a little old man with a shock of gray hair erect on his head. My salesman's heart fell at first glance. He did not look worth a dollar. He greeted me most courteously and invited me to be his guest at the inn as long as I could stay. I had told the driver of the mule team to wait so that I could go back with him, but Mr. Patrick

would not hear of it. So I decided to stay over until the next day, even if there was not a dollar order in sight. Most of the next twenty-four hours was devoted to taking walks with Mr. Patrick and trying to find out why he had requested a call. Every question toward this end was answered by a story.

The scenery was marvelous. The waterfalls made a sheer drop of many feet, suggesting electric power lighting up Chimney Rock and the whole valley. Ferns and lichens made amazing pictures on the cliffs, and such plants as hemlocks, rhododendrons and kalmias furnished the framework for the picture. But it was the stories that gave me the lead to finding out at what Mr. Patrick was aiming, which was no less than founding an industrial college to give employment to the natives and making the college pay its way. One of his stories ran somewhat as follows:

There was a family up in the mountains known as the dirty Jenks. Mr. Patrick went to see them and found a rather forlorn looking bunch, consisting of Mr. and Mrs. Jenks, two girls, barelegged and with matted hair, and a dirty-nosed boy whittling a stick. Mr. Jenks was leaning against the doorpost smoking a pipe. Mrs. Jenks was sitting in a rocking chair smoking. After introducing himself as their neighbor from down the valley, Mr. Patrick noticed the rocking chair in which Mrs. Jenks sat was a strong homemade one, made out of hickory. He asked Mr. Jenks if he had made it. He allowed he did.



## 1 MILLION AMERICAN RED PINE

3-year, 6 to 8 ins., \$16.00 per 1000

Finest Stock in the Country — We grow 14,000,000 trees a year —

Write Today for Complete Stock List and Special Christmas Tree Growers' Guide.

MUSSER FORESTS, INC.

Indiana, Pa.



**EVERGREENS**—In a large assortment of Thuja, Juniperus, Chamaecyparis and Taxus.

**LARGE SIZES**—Cryptomeria, Arborvitae, Pine and Moss Cypress.

**SHADE TREES**—Linden, Norway Maples, Oriental Planes, Oak and Ginkgo.

**ORNAMENTAL**—Flowering Cherries, Crab Apple and Beeches, named varieties.

## BAGATELLE NURSERY

Half Hollow Hills

P. O. Huntington Station, N. Y.

## BOBBINK & ATKINS

Nurserymen and Plantmen

Visitors always welcome.

Paterson Ave. E. Rutherford, N. J.

## LINING-OUT STOCK

### HESS' NURSERIES

Mountain View, N. J.

### SHEPARD NURSERIES

Growers and Distributors of

### ORNAMENTAL NURSERY STOCK

60 acres growing. Skaneateles, N. Y.

## PRIVET and BERBERIS

Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

MILFORD DELAWARE

Mr. Patrick told him that for every one he could make as good as that one and would bring down to the valley, he would give him \$5. Noticing there was a rag carpet on the floor, he asked Mrs. Jenks if she had woven it. She allowed she had. Mr. Patrick told her he would give her so much a square yard for weaving and he would furnish the rags. He showed a small wooden shoe to the boy who was whittling a stick, asking him if he could whittle one as good. If he could, he would give him a quarter for each one.

Mr. Patrick sold these goods to tourists that passed through the valley. That was his method of starting an industrial college. As soon as he could get enough people weaving rag carpets, he would have an expert come to teach them improved methods. When I suggested the use of capital, he said, "No, that is the worst thing you can do. A lady wanted to donate a large sum for the college, but I would not accept it. And I would not permit her to send clothes to the Jenks girls unless they worked for them."

To make a long story short, I learned from others that Mr. Patrick was the industrial agent for the Southern railroad, the founder of the Southern Pines and a man of wealth.

Here was a place in which the average businessman would say there was not a dollar, but where Mr. Patrick envisioned a thriving community. The story about the Jenks, together with what I saw and learned from others, gave me the key to Mr. Patrick's methods and why he was the industrial agent for a large railroad system that traversed many impoverished and undeveloped areas.

Mr. Patrick had gone into the Chimney Rock region on a fishing trip, had seen the beauties of the place and eventually had got the natives to build the Esmeralde Inn. As I recall, it was built of logs and the main floor was supported by tree trunks. The fireplace in the lobby was constructed of large rocks. The food served was of a pronounced local flavor—mountain trout, sorghum, corn bread, hog and hominy. The furniture was evidently locally made. Mr. Patrick was developing a community where wealthy people from the tropics could build a home in which to live during the hot weather. He used his brains to put the kind of capital to work that was lying idle there and upon which he would not have to pay interest.

E. H.

# SURPLUS ITEMS

- 40 Sugar Maple, 1 to 1½-in. cal.
- 75 Cutleaf Maple, 2 to 2½-in. cal.
- 60 Crataegus coccinea, 6 to 10 ft.
- 20 Crataegus cordata, 5 to 6 ft.
- 60 Celtis occidentalis, 2½ to 3-in. cal.
- 100 Fraxinus americana, 1½ to 2-in. cal.
- 25 Bechtel Crab, 4 to 6 ft., well branched.
- 70 Sycamore, 4 to 6 ft.
- 200 Silver Poplar, 1 to 3-in. cal.
- 150 Carolina Poplar, 1 to 3-in. cal.
- 400 Lombardy Poplar, 5 to 14 ft.
- 100 Golden Weeping Willow, 6 to 8 ft.
- 150 Wisconsin Weeping Willow, 8 to 10 ft.
- 200 European Mountain Ash, 8 to 10 ft.
- 150 American Linden, 2 to 3-in. cal.
- 400 American Elm, 3 to 5-in. cal.
- 300 Moline Elm, 2½ to 5-in. cal.
- 25 Prunus Thundercloud, 6 to 8 ft., heavy branched.
- Asst. Apple trees, 2½ to 4-in. cal.
- 150 Aralia pentaphylla, 5 to 6 ft.
- 1500 Barberry, 2 to 3 ft.
- 250 Caragana, 3 to 5 ft.
- 500 Red Dogwood, 3 to 6 ft.
- 100 Gray Dogwood, 3 to 4 ft.
- 100 Witch Hazel, 3 to 4 ft.
- 500 Amur River Privet, heavy, 4 to 5 ft.
- 500 Iboia Privet, 3 to 4 ft.
- 200 Regal Privet, 2 to 3 ft.
- 1000 Honeysuckle, pink, 4 to 6 ft.
- 400 Philadelphus lemoinei, 3 to 4 ft.
- 500 Buckthorn, glossy, 3 to 6 ft.
- 150 Ribes aureum, 3 to 4 ft.
- 200 Spiraea latifolia, 3 to 4 ft.
- 200 Spiraea bumalda, 2 to 3 ft.
- 300 Spiraea foebell, 2 to 3 ft.
- 500 Snowberry, 3 to 4 ft.
- 500 Indian Currant, 3 to 4 ft.
- 400 Common Lilac, 2 to 4 ft.
- 300 Common Lilac, white, 2 to 3 ft.
- 100 Villosa Lilac, 3 to 4 ft.
- 200 Viburnum americanum, 3 to 6 ft.
- 300 Viburnum dentatum, 4 to 6 ft.
- 200 Viburnum lentago, 5 to 6 ft.

Must be sold to clear land that is now being disposed of. Stock sold, not dug.

## WAUKEGAN NURSERIES

Green Bay Rd. Waukegan, Ill.

Phone: Majestic 30

### BURR

Leading wholesale source for Nursery Stock.

Send us your Want List.

**C. R. BURR & CO., INC.**  
Manchester, Conn.

### NORTHERN COLLECTED EVERGREENS

Hardy, well rooted. Abies balsamea, Thuja occidentalis, Tsuga canadensis.

Priced per 1000.

3 to 6 ins. . . \$ 6.00 9 to 12 ins. . . \$18.00  
6 to 9 ins. . . 10.00 12 to 18 ins. . . 25.00

Write for new list.

**WILLIAM CROSBY HORSFORD**, Charlotte, Vt.

## NOVELTY PERENNIAL and ROCK GARDEN PLANTS

Wholesale Trade List now ready.

Send for your copy.

**CARROLL GARDENS** Westminster, Md.

# Landscape Men's Problems

By R. Morgan Smith

## UNSTABLE FOUNDATIONS.

There has been a lot of controversy over foundation plantings, but it is not my intention to stick my neck out at this time by telling what I believe to be the best in arrangement and composition, but I think I can tell why many foundation plantings fail.

Generally, the choicest and most expensive evergreens and shrubs are grouped about the foundation of the house and, contrarywise, these plants often are set in anything but the choicest soil.

When a building foundation is laid; there is left alongside a ditch of considerable size, that looks not unlike a medieval moat, and it is, of course, for the purpose of allowing the water-proofer to put a coating on the concrete foundation.

Now, this is where the fun begins. That ditch has to be filled, and it takes a lot of filling. It is a swell place to dispose of old razor blades and, incidentally, all the artisans working on the building get similar ideas regarding their trash. So in goes everything, including the old kitchen stove and sink, sheet metal scraps, wire lath, bricks, roofing paper, wood shavings, pieces of lumber, reinforcement bars, concrete slabs, plaster, rags, paint buckets, old work clothes and what have you. If the teamster's horse happened to die on the job, it would probably go in also.

After all this fine assortment of "clean fill" is in place, it is covered up with a layer of the heavy clay excavated from the basement, or sometimes with something worse like burnt foundry sand, and finally a thin veneer of good black soil is placed on top. The poor owner (and oftentimes he doesn't yet know that he is to be the owner) eventually sees the finished job and thinks it looks fine. It is like "a whited sepulcher full of all uncleanness."

At this point the landscaper is called in. If he is smart and knows something about planting around new buildings, he will dig a few test holes before he gives an estimate, but if he is a sucker he will take the job as is.

Well, you guessed it! There will be a choice flow of billingsgate from the boys who dig the holes for the plants. Probably a little good soil will be used to fill in around the newly planted stock, which may live long enough to pass over the guarantee

period, and the blissful owner thinks he has a job.

And then "the rains came," copious, heavy rains, and some morning soon after, the owner will discover he has a "sunken garden," slowly descending to China. The plants will begin to take on a sickly hue, because a lot of the stuff dumped in there has started to decompose and send off gas. It will continue to decompose and settle, maybe for several years. So that's the answer to "Why do so many foundation plantings fail?"

A wise owner or an honest builder will see that nothing but clean soil goes into that trench. On top of the subsoil there should be at least two feet of good rich topsoil, all well settled, for the stock to grow in, for, as stated before, the choicest and most

expensive plants are generally placed around the foundation.

It's about time that architects and builders awoken to this fact and do something about it. In the meantime, let landscapers beware.

## NUISANCE CALLS.

Do you frequently have a call from someone who wants an estimate on repairing damages done by some motorist who has smashed into a tree or hedge or has torn up a strip of lawn?

Generally these calls are from insurance adjusters, who want you to rush right out, look at the damage and give them a report and estimate for the necessary repairs. Nine times out of ten you will never hear from them again, and your time and gasoline have been wasted.

No one is particularly desirous of work of this kind, as it is usually a patching job; nevertheless, the calls continue to come in regularly,

### 7-yr. EVERGREENS X

Transplants, 12 to 24 ins.

### NORWAY SPRUCE and WHITE SPRUCE

RED and WHITE PINE

100 for \$16.00 or 200 for \$30.00

500 for \$60.00

Order now. Beetle Certificate if required.

FISCHER NURSERY, Bakerstown, Pa.

## 20,000

AZALEA calendulacea, vaseyi, nudiflora and arborescens, from 1 to 6 ft.

also

RHODODENDRON maximum, catawbiense and carolinianum.

All stock nursery-grown (transplanted clumps). Write for prices.

R. B. DREWETTE

State Hwy. 29. Mountainside, N. J.

## EVERGREENS

Hardy, northern-grown

B&B Evergreens

Write for our wholesale list.

HOLTON & HUNKEL CO.  
NURSERIES

P. O. Box 1747 Milwaukee 1, Wis.  
Nurseries at Brown Deer.

## BERBERIS THUNBERGI — 3-yr., not transplanted

Per 1000

12 to 15 ins., 2 br. and up \$60.00

15 to 18 ins., 3 br. and up 80.00

All orders received for 1000 or more, covered by cash, before April 1, boxed free of charge. No small orders boxed.

GARDNER'S NURSERIES  
Rocky Hill, Conn.

## OUR 75th YEAR

LAKE'S  
SHENANDOAH NURSERIES  
SHENANDOAH, IOWA

## CANADIAN HEMLOCK and AMERICAN ARBORVITAE

Collected Native Stock	Per 1000
3 to 6 ins.	\$ 6.00
6 to 9 ins.	10.00
9 to 12 ins.	18.00
12 to 18 ins.	25.00

Cash please.

Trade List on request.

R. M. COLE

Box 37

Charlotte, Vt.

## BARGAIN

200,000 Trees—Land sold for park site.  
Must move at sacrifice.

Chinese Arborvitae, 5 to 6 ft. .... \$1.00

Pfitzer Junipers  
nice root-pruned plants  
30 to 36 ins. .... 1.50  
3 to 4 ft. .... 2.00  
4 to 5 ft. .... 2.50

Baker Arborvitae  
4 to 5 ft. .... 1.50  
5 to 7 ft. .... 2.00

Prices on evergreens, truck or carload,  
F.O.B. Lubbock.

Chinese Elm (Ulmus pumila)  
2 to 4 ft. .... \$0.05  
5 to 6 ft. .... .20  
6 to 8 ft. .... .25  
8 to 10 ft. .... .40  
10 to 12 ft. .... .75  
12 to 14 ft. .... 1.00

Green Ash  
6 to 8 ft. .... .40  
8 to 10 ft. .... .60

Catalpa speciosa  
6 to 8 ft. .... .50  
8 to 10 ft. .... .75

Red Maple, Sweet Gum, Elder  
8 to 10 ft. .... .60

Cercis (Redbud)  
3 to 4 ft. .... .25  
4 to 5 ft. .... .35  
5 to 6 ft. .... .45

Gem Everbearing Strawberries,  
\$25.00 per 1000.

### FRUIT TREES

Plum, Cherry, Apple, Pear, Apricot,  
Peach.

Good assortment.

18 to 24 ins. .... \$0.50  
2 to 3 ft. .... .60

Less than \$100.00 order,  
packing 10 per cent extra.

**TEXAS FLORAL AND NURSERY CO.**  
2107 21st St., Lubbock, Texas

and the question is, how to handle them.

One good way to protect yourself is to charge \$5 for the inspection and report, offering to allow the customer credit for this amount in case you do the job. Be sure you get a written order for the expenditure, if you do not know with whom you are dealing, as later the caller may disclaim authorizing it.

Of course, you can say you are too busy or do not handle work of this kind, but you cannot always get out of it. If you do give an estimate, make it sufficiently large, as you oftentimes run into difficulties that you cannot foresee. If you figure the job in the regular way and then multiply by two, you will probably come out about right, but it is still a big nuisance.

### SOIL-SOAKER.

One of the handiest and most efficient watering devices on the market is the soil-soaker. During the past season, which was unusually dry in many sections, it proved to be a lifesaver.

People today are so extremely busy, working long hours and even seven days a week, that they do not have the time or the inclination to do much garden work. Consequently, their plants suffer.

Those who used the soil-soaker found in it the answer to their prayers, for they could simply attach it to the hose and forget it for a whole day or night. It suits the lazy man to a tee.

The cost is trivial. Some department stores have been selling 18-foot lengths for \$1.85. The device comes in different widths and lengths. It is so easy to handle that a gardener should not be without one.

When you have a lot of hard digging to do, it will cut labor costs to use a soil-soaker ahead of time. Some cemeteries are using them in grave digging, as they will soak down six feet or more. It would be good insurance to include a soil-soaker with every important planting job you do.

R. Morgan Smith.

THE Jackson & Perkins Co., Newark, N. Y., has purchased a 125-acre farm on U. S. highway 35 near Richmond, Ind. Several thousand evergreens were lined out last fall, and the company expects to build greenhouses shortly, specializing in the propagation of evergreens and perennials. John Hollenbach, a veteran nurseryman, is in charge.

## EVERGREEN SALE

Due to manpower shortage, we offer all stock in the field 2 to 4 ft., just the right size and perfect at \$2.00 or less, some at your own price.

Hemlock	Taxus
Canert	Pfitzer
Columnaris	Savin
Virginiana glauca	Mugho Pine
Hilli	Austrian
Burki	Scotch
Vonehron	Pyramid
Spiny Greek	Globe
Meyeri	Biota
Irish	Norway Spruce

Bring your help and equipment and get a truckload, or select them now and we will hold them until digging time.

### ZEPHYR HILL NURSERY

1 mile south of Springfield, Ohio.  
Phone: 8889 Rt. 68

### We Offer—

#### FOR SPRING 1945

EVERGREENS—In a large assortment of PYRAMIDAL and GLOBE ARBORVITAE, PFITZER JUNIPER and YEWs in grades at attractive prices. SOME LARGE SPECIMEN EVERGREENS, SHRUBBERY and SHADE TREES.

Mail want list for prices.

**THE WESTMINSTER NURSERIES**  
Westminster, Md.

## HEMLOCK

Rhododendrons

Kalmia — Azaleas

Write for our list

### CURTIS NURSERIES

Callicoon New York

### Ornamental Trees, Shrubs and Evergreens

Write For Our Wholesale Trade List

**W. & T. Smith Corporation**  
Telephone 2539 GENEVA, N. Y.

**Rhodos**  
BOTH NATIVE  
AND NURSERY GROWN  
**KALMIA AZALEAS**  
Hemlocks and Pieris  
**La Bars'**  
STROUDSBURG PA.

### FRUIT TREES AND SMALL FRUITS

#### HARRISON BROTHERS NURSERIES

G. Hale Harrison, General Manager  
BERLIN, MARYLAND

#### PRINCETON NURSERIES of PRINCETON, N. J.

SUPERIOR  
Hardy Ornamentals



## West Virginia Meeting

The West Virginia Nurserymen's Association, at its meeting at Charleston, February 10, made plans to participate in the "living memorials" movement, discussed the program for the coming summer meeting, made plans for securing a chapter of the American Association of Nurserymen and entered into a lively discussion of the best ways to landscape the small West Virginia homes. The meeting was well attended by the members and was honored by the presence of such guests as R. P. White, executive secretary of the A.A.N.; Frank LaBar, of LaBar's Rhododendron Nursery, Stroudsburg, Pa., and past president of the A.A.N., and Howard Kyle, of Spring Hill Nurseries, Tipp City, O. Dean C. R. Orton, of the college of agriculture of the University of West Virginia, was also in attendance at the meeting.

The movement to build useful and beautiful parks, playgrounds, etc., as war memorials, instead of monuments and stacks of cannon balls as in the past, was discussed. Frank LaBar told the association about the movement in the country at large and recommended the association promote this project. He further suggested each member become a part of the local groups planning such memorials. The association decided to appoint a committee to study this matter and report at the coming Wheeling meeting. It was further decided to purchase a few copies of the brochure, "Living Memorials," published by the A.A.N., and to distribute them to civic leaders in the state.

At the morning session, T. D. Gray, extension service, College of Agriculture, Morgantown, W. Va., led a discussion on "Landscape Design." He first gave an interesting review of the development of landscape design and then took a couple of typical West Virginia homes as examples to illustrate principles of design. The members entered freely into the designing of the landscape for these two homes. The development of one home, with a decided slant to the ground in front of the house, brought out a rather heated discussion. Norman Cole held the development should emphasize the slope rather than to attempt to alleviate the slope.

At the afternoon meeting Dick White informed the members of the services offered by the national or-

ganization and gave a history of its growth. Frank LaBar also spoke briefly on the advantages of belonging to a trade organization and told of some ways the Pennsylvania Nurserymen's Association had saved the nurserymen of his state considerable sums of money. He further appealed to the association to get back of the state legislature and see that the fees charged nurserymen were eliminated, for he pointed out West Virginia was among the few remaining states asking such a fee.

Plans were made at this meeting to strengthen the state organization and to increase its membership. President John Amos offered a program for improving the association, which included a new set of bylaws incorporating the association as a nonprofit corporation and the appointment of a committee to secure new members. Motions to put this program into effect were passed. The matter of an increase in the dues for active and affiliated members was discussed, and it was decided to fix the fee for active members at \$5 and affiliated members at \$10.

It was decided that the theme for the summer meeting at Wheeling should be "Soils," that the American Agricultural Chemical Co. be requested to show its film on this subject, that a speaker be invited from the West Virginia agricultural experiment station and that an open

forum be held on the subject. The time for this meeting was fixed as July 12 and 13 unless the executive committee finds these dates conflict with other meetings already scheduled.

Other activities included the banquet at the Canton restaurant and the evening entertainment at the home of Mr. and Mrs. F. Waldo Craig. Several of the ladies were present for these events.

The president of the association is John Amos, of Conner & Amos, Charleston, who at the present time is the speaker of the state house of representatives. The vice-president is Fred Wildern, of John Dieckmann & Sons, Elm Grove, and the secretary-treasurer is F. Waldo Craig, of the state department of agriculture, Charleston.

ED SAPP has changed the name of his establishment at Waycross, Ga., from the Ed Sapp Floral Co. to Sapp's Nursery & Camellia Farm.

<b>Youngberry Plants</b>	Per 1000
No. 1, tip layers.....	\$30.00
<b>Andorra Junipers</b>	
8 to 12 ins., 1-yr., field-grown .....	50.00
12 to 15 ins., 2-yr., T. . .	75.00
<b>Savin Junipers</b>	
8 to 12 ins., 1-yr., field-grown .....	60.00
<b>ATHENS NURSERY CO.</b>	
Athens, Ala.	

### LINING-OUT STOCK OUR SPECIALTY . . .

**Shade Tree Whips . . .** a timely finished product saving 2 to 4 yrs. growing effort . . . excellent variety.

A very complete line of  
**ORNAMENTAL TREES, SHRUBS  
and EVERGREEN SHRUBS,**  
including many scarce items.  
Send for Spring 1946 list.

**THOMAS B. MEEHAN CO.**  
DRESHER, PA.

### JUNIPER GLAUCA HETZI

Liners still available.

**FAIRVIEW EVERGREEN  
NURSERIES**

Fairview, Pa.

### EVERGREEN SEEDLINGS

Collected

Per 1000

<b>ILEX OPACA, American Holly</b>	
3 to 6 ins.....	\$4.00
6 to 9 ins.....	6.00
<b>JUNIPERUS VIRGINIANA,</b>	
Red Cedar	
3 to 6 ins.....	3.00
6 to 9 ins.....	5.00
<b>KALMIA LATIFOLIA,</b>	
Mountain Laurel	
2 to 4 ins.....	4.00
4 to 6 ins.....	6.00
<b>TSUGA CANADENSIS, Hemlock</b>	
3 to 6 ins.....	4.00
6 to 9 ins.....	6.00

**JOHNIE McCARVER & SONS**  
McMinnville, Tenn.

### SHADE TREES CONIFERS

Good assortment of  
varieties and sizes.

Write Us

**JACKSON & PERKINS COMPANY**  
Newark, New York

Refer to March 1 issue  
of the American Nurseryman  
for our

## SURPLUS LIST

SHERMAN NURSERY COMPANY  
Charles City, Ia.

## COLORADO BLUE SPRUCE

4-yr. close transplants.  
Bed-run Per 100 Per 1000  
3 to 5 ins. \$5.00 \$26.00  
Shipped early in April.

Trees grown from seeds from cones  
hand-picked from blue trees in  
Colorado.

MICHIGAN-GROWN  
WALTER A. STUDLEY NURSERY  
Dept. AN Fennville, Mich.

## FILL YOUR SALES YARD

With a carload of Verhalen  
Nursery Stock.

Hardy Varieties

Wholesale Only Catalog Ready  
Low Freight Rates

VERHALEN NURSERY COMPANY  
Scottsville, Texas

## EVERGREEN LINERS

Taxus, many varieties,  
Seedlings and transplants.

Ask for our latest price list.

HEASLEY'S NURSERIES  
Freeport Road, Butler, Pa.



## EVERGREENS

Growers of Quality Evergreens  
Lining-out Stock a Specialty  
Write for Trade List

EVERGREEN NURSERY CO.  
Established 1884 : STURGEON BAY, WIS.

Book orders early.

## SPECIMEN EVERGREENS

SNEED NURSERY COMPANY

P. O. Box 798 Oklahoma City, Okla.

## BURTON'S

HEADQUARTERS FOR  
EVERGREEN GRAFTS, TRANSPLANTED  
EVERGREENS, SHRUB LINERS.  
Write!  
RARE ITEMS YOU DO NOT  
FIND IN MOST LISTS!

HILLTOP NURSERIES  
CASSIOWAY, OHIO

## LARGER REDBUD.

Mention of a large redbud tree appeared in the February 15 issue of American Nurseryman. There is an old-timer on the grounds of the O'Reilly General hospital, Springfield, Mo. I measured this tree last year. At one foot from the ground it was seven feet in circumference. The trunk bulged some, and at four feet from the ground it measured seven feet and nine inches around. The tree was in rather poor health and really should have been in the hospital, since there were a number of broken limbs that had never received the proper attention. However, it is alive, and I understand from Mayor Grubb that it has been a faithful bloomer.

J. C. Nichols Co.  
Stanley R. McLane.

## SEES EVERGREENS IN WEST.

L. L. Kumlien returned March 3 from a month's trip, gathering material for a book of larger scope to replace Hill's Book of Evergreens, now out of print. From New Orleans he visited nurseries and other points of interest in Louisiana and southern Texas. On the Pacific coast he visited nurseries, parks and arboreta from Los Angeles to Vancouver. The nurserymen throughout the section he found enjoying a heavy demand and carrying on work under difficulties such as the shortage of help.

On his return he found that the business on the books of the D. Hill Nursery Co., Dundee, Ill., was far in excess of any recent year. The outlook in the middle west is quite favorable with regard to weather, as the record snowfall has practically all soaked into the soil and there is little frost in the ground. Early arrival of warm weather to facilitate digging would aid greatly in the shipment of evergreens.

## ST. LOUIS GROUP MEETS.

The Landscape and Nurserymen's Association of Greater St. Louis held its regular meeting February 12 at the American Legion hall, University City, Mo. Howard E. Ward, of the Ward Horticultural Co., gave a brief talk on the book, "The Plowman's Folly," by Edward H. Faulkner. This was followed by an open discussion by the members. The general consensus was that Mr. Faulkner's methods were not generally adaptable to this area, but there were things to think about in many of his theories.

## NORTHERN-GROWN STOCK

Grown in the Natural Home of the  
Evergreen.

	Per 1000
Platte River Red Cedar Transplants.	
NO BLIGHT	
2000 3-yr., 5 to 8 ins.	\$45.00
American Arborvitae Transplants	
2000 8 to 12 ins.	50.00
Douglas Fir Transplants	
1500 6 to 10 ins.	40.00
White Pine Seedlings 50,000	
4 to 6 ins.	10.00
6 to 10 ins.	15.00
American Arborvitae Seedlings 50,000	
4 to 6 ins.	12.00
6 to 8 ins.	15.00
Concolor Fir Seedlings	
25,000 4 to 6 ins.	15.00
Colorado Blue Spruce, Select	
15,000 4 to 6 ins.	15.00
White or Canoe Birch	Per 100
4 to 5 ft.	\$ 8.00
Hard or Sugar Maple	
6 to 8 ft.	35.00
Ostrich Plume Ferns	
Large clumps	6.00

Our usual strict grade and packing  
terms — 5 per cent discount cash with  
order. No C.O.D. Satisfaction guaranteed.

J. R. PALMER & SON

Blackduck, Minn.

## Northern-grown Stock

Send  
for  
Price  
List.

J. V. BAILEY NURSERIES

St. Paul 6, Minn.



Wholesale growers of the best  
Ornamental Evergreens,  
Deciduous Trees,  
Shrubs and Roses.

Write for our current trade list.

THE KALLAY BROTHERS CO.  
Painesville, Ohio

## EVERGREEN TREE LINERS

Write for price list.

SUNCREST EVERGREEN NURSERIES

Johnstown, Pa.

ORNAMENTAL SHRUBS  
SHADE TREES, VINES  
FOREST TREE SEEDLINGS  
LINING - OUT STOCK

BOYD NURSERY CO., McMinnville, Tenn.

## PEONIES

Wholesale and Retail  
PHIL LUTZ PEONY FARMS  
Boonville, Ind.

## In the Country's Service

LIEUT. THOMAS HOBBS, son of Fred Hobbs, of C. M. Hobbs & Sons, Bridgeport, Ind., is in the front lines in Germany.

CHARLES WILMORE, Wheat Ridge, Colo., has received word that his son Kenny was lost in action on the western front in Europe.

EDWARD H. SCANLON, editor of Trees magazine, was discharged from the navy January 18 after a considerable period of medical attention, and he is active again at Santa Monica, Cal.

FRANK ABRAMS, formerly in the employ of the Tiger Nurseries, Brookhaven, N. Y., is now stationed with the navy at Clearwater Beach, Fla., writes W. E. Corrigan, president of that firm.

VERNA J. RHOADS, secretary of the Benton County Nursery Co., Rogers, Ark., reports that George W. Eoff, a member of that firm, is now a sergeant with squadron F of the army air forces, at Pyote, Tex.

### MISSING IN ACTION.

Lieut. Henry L. Thompson, son of A. L. Thompson, owner of the Rosemont Nurseries, Tyler, Tex., has been reported missing in the European theater of war. A message from the War Department to his parents said that he had been missing in action since February 7.

Lieutenant Thompson attended Tyler high school and was graduated from Cornell University, Ithaca, N. Y., in 1940. Before enlisting in the army air corps in 1942, he was associated with his father in the Rosemont Nurseries. He served as an instructor at various army fields in this country and was sent overseas last year. A Mustang fighter pilot, he was stationed in England.

A brother, Lieut. Delbert Thompson, is also with the army air corps in England. Only a few weeks ago the two brothers met there.

### FREED IN PHILIPPINES.

A. R. Wheelock, North Collins, N. Y., sends a copy of a letter written to his grandparents by George W. Heiser, who had been a prisoner in the Philippine islands for three years and was freed February 4. The lad worked for Mr. Wheelock and joined the national guard in 1939. He enlisted in the army February 6, 1940. He was sent to the Philippine islands where he was tak-

en prisoner at the fall of Corregidor.

The boy's letter, dated February 6, 1945, reads in part as follows:

"I am very glad to have the opportunity to write you again under the American flag. I am a free man again. You, or anyone else, could not understand how happy I am. When I saw the American flag carried by the American soldiers who delivered us from the Japs, I had to cry. The boys were as happy as we prisoners; they gave us all but the shirts on their backs. The American soldier is doing a good job.

"It is a godsend to eat American food again, instead of the plain rice and fish soup that the Japs fed us. On special occasions they would give us some field corn to go with the rice.

"Hope to be with you in the near future. Say hello to Mr. and Mrs. Wheelock and tell them it won't be long before I can drive old Nig again. February 4 is one day I will never forget. Good luck to you all and may God bless you as He did us. Love."

George.

### LONG ISLAND SECRETARY.

The war has been especially hard on the Long Island Nurserymen's

### WANTED

For Early Spring Delivery  
1000 Thyme, tall, and other hardy herbs.  
1000 Gooseberries, 2-yr., No. 1.  
500 Currants, 2-yr., No. 1.  
5000 Calladilla Privet, assorted sizes.

### FOR SALE

25,000 Sage herb, broadleaf Dalmatian.  
1,000 large clumps, English broadleaf.  
Bulk garden seeds at wholesale.

### WALLACE SEED STORE

182nd and Horace Harding  
Flushing, N. Y.

### WANTED

#### FRUIT TREE STOCKS

Apple, Pear, Plum and Cherry

Also Rose Seedlings for budding.

### STORRS & HARRISON NURSERIES, INC.

Painesville, Ohio

## AMERICAN NURSERYMAN

Association by taking away its secretarial talent. Charles R. Mouquin, Glen Head, who was reelected secretary of the association last year, has been serving for some time in the marines. To carry on during his absence, E. C. Anderson, of Anderson's Nursery, Amityville, N. Y., was named acting secretary. When he in turn entered the army, the organization was without a secretary up to the time of its annual meeting, at New York city last month, when Frank Williams, Bagatelle Nursery, Huntington Station, was elected to that office.

### FORSYTHIA INTERMEDIA SPECTABILIS.

The forsythias are among our most common and most attractive flowering shrubs. When the forsythias flower we know that spring is at hand.

Three species of forsythias are common in the trade. Forsythia suspensa is drooping or pendulous in its

## SPECIAL NOTICE

We still have a few thousand Pear grafts in Kieffer, Garber and Bartlett. 400 Kieffer Pear, 1-yr., 2 to 3 ft., \$35.00 per 100. Also have a few thousand Apple grafts in Jonathan, Red and Yellow Delicious, Turley, Stayman, York, Gano, Grimes Golden, Wealthy, Transparent and Rome Beauty.

Red Delicious, 4 to 5 ft. whips, \$35.00 per 100.

2000 each Apple and Peach in leading varieties for lining out in 6 to 12 ins., 12 to 18 ins. and 18 to 24 ins.

Amur River Privet, 18 to 24 ins., 2 to 3 ft. and 3 to 4 ft.

Expect to plant out in the field what we have left in within the next few days. If you have not placed your order, we advise sending it at once.

We also have a few thousand American Ash and Chinese Elm in 6 to 8 ft., up to 3-in. caliper. Also a few thousand Mugho Pine, Globe Arborvitae, Pitters, Irish and grafted Junipers in large sizes. These are sheared specimen trees.

### EGYPTIAN NURSERY & LANDSCAPE CO.

Farina, Ill.

### PEONIES

are profitable if you grow the best cut flower varieties. We offer best varieties, 3 to 5-eye divisions.

	Per 100	Per 1000
BARONESS SCHROEDER	\$35.00	\$300.00
EDULIS SUPERBA	18.00	150.00
FELIX CROUSSE	20.00	150.00
FESTIVA MAXIMA	18.00	150.00
FRAGRANS, late red	18.00	150.00
LADY LEONORA BRAMWELL	18.00	150.00
MODESTE GUERIN	25.00	200.00
MONS. JULES ELIE	35.00	300.00
PRESIDENT TAFT	35.00	300.00
QUEEN VICTORIA	18.00	150.00
SARAH BERNHARDT	30.00	250.00
VENUS	25.00	200.00

Write for full list.

PHIL LUTZ PEONY FARMS  
Boonville, Ind.

### PRONOUNCING DICTIONARY of Plant Names

64 pages, 3000 names, 25c per copy  
American Nurseryman Chicago



## WASHINGTON ASPARAGUS

**Jumbo size**

The best from seeding

Spring 1943

**\$18.50** per 1000.

Light, 1-year size

**\$8.50** per 1000.

Packing included.

Samples sent on request.

**M. J. HUNZIKER & SONS**  
Nurserymen  
P. O. Box 313, Niles, Mich.

## RED RHUBARBS

MacDonald  
and  
Canada Red

**ANDREWS NURSERY CO.**  
FARIBAULT, MINN.

## WASHINGTON ASPARAGUS PLANTS

1-yr., strong plants; grown under irrigation; of good quality. Sample on request.

**\$1.75** per 100

**\$15.00** per 1000

**WAYSIDE NURSERIES**  
1630 W. Good Hope Rd.  
Milwaukee 9, Wis.

**ASPARAGUS ROOTS**  
Washington and Paradise  
1 and 2-year.

## VICTORIA RHUBARB ROOTS

Ask for quantity prices.  
Wholesale only.

We also grow a complete line of

**Small Fruit Plants**

**KRIEGER'S WHOLESALE NURSERY**  
Bridgman, Mich.

## BUXUS SEMP. WELLERII

(Weller's Hardy Northern Type)  
Only Boxwood proved hardy in Northern States for Twenty Years.

Ask for our Perennial catalog.

**WELLER NURSERIES CO., Inc.**  
Leading Perennial Growers  
Holland, Mich.

habit of growth. Forsythia viridisima is erect in its habit of growth and is possibly the least effective of the three species because of its tenderness. Forsythia intermedia is a hybrid of the two species mentioned above and intermediate in its growth habit. It is mostly upright and spreading, although some of the branches tend to be quite pendulous. One of the best varieties of Forsythia intermedia, in fact one of the best of all the forsythias, is the showy border forsythia, Forsythia intermedia spectabilis. It is a vigorous grower and almost always produces an abundance of blooms. It flowers a few days later than Forsythia suspensa, usually blooming at Columbus, O., the last week in March or the first week in April. The flowers are large and bright yellow. Some prefer the variety primulina with its pale yellow flowers.

As most plantmen know, the three common species of forsythia can be readily identified by the type of pith. The pith of Forsythia suspensa is solid at the nodes and hollow at the internodes. With Forsythia viridisima the pith is chambered, or sometimes its vigorous shoots are hollow at both the nodes and internodes. Forsythia intermedia takes its characteristic from the two parents in that the pith is solid at the nodes and chambered at the internodes.

The forsythias are not particular as to soil. They will usually do well in any good garden soil. Because of the tenderness of the flower buds on some of the types, it is advisable to use them in slightly protected situations. They should be used in sunny exposures. The forsythias require a considerable amount of pruning. However, the pruning should be done carefully in order to preserve the natural habit of growth of the plant and not to destroy the flower buds. It is not unusual to find the forsythias given a "haircut," which means that the flowers will be produced mainly in the lower part of the plant. The best method of pruning is to follow the gradual renewal by removing a few of the larger stems each year. Propagation can be accomplished by either softwood or hardwood cuttings.

The showy border forsythia finds its best use as a specimen shrub or in a border planting. Because of its general habit of growth, hardiness, adaptability to soil and environmental conditions, and its profusely borne flowers, it finds extensive use in landscape plantings.

L. C. C.

## C. M. Hobbs & Sons, Inc.

BRIDGEPORT

INDIANA

Established 1875.

**WHITE-FLOWERING DOGWOOD**

**GINKGO**

**NORWAY MAPLE**

**SOFT MAPLE**

**SWEET GUM**

**THURLOW WILLOW**

**WELL GROWN EVERGREENS**, in variety.

## THE NEW CHIPMAN'S CANADA RED RHUBARB

Still available.

In quantity, as low as 35c.

Write

## SUMMIT NURSERIES

Stillwater, Minn.

## ASPARAGUS Martha Washington

Extra heavy roots.

	Per M
Large size .....	<b>\$15.00</b>
Medium size .....	<b>12.00</b>

Ask for special prices on large quantities. Samples sent on request.

**KENYONS NURSERY**  
Oklahoma City, Okla.

## CHERRY TREES

Fall-Bearing Varieties

Sweet September

August Supreme

100 rate

9/16-in. cal., 4 ft. .... each, **\$1.00**

7/16-in. cal., 3 to 4 ft. .... each, **.75**

5/16-in. cal., 2 to 3 ft. .... each, **.50**

## W. N. SCARFF'S SONS

New Carlisle, Ohio

## ASPARAGUS

Washington and Paradise

## RASPBERRIES

Cumberland Transplants

**COE, CONVERSE and EDWARDS CO.**  
Fort Atkinson, Wis.

## Building Outlook

How soon and to what extent can we expect building expansion? J. D. Parsons, district manager of the F. W. Dodge Corp., Buffalo, speaking on "Our Future Business as Related to Building Expansion," before the New York State Nurserymen's Association, at Rochester, January 12, made some predictions on what construction activity could be expected in the United States the first year after X-day. (X-day is the day when the limitations on the use of materials, equipment and manpower are substantially relaxed.) Drawing these conclusions from statistics of the Dodge Corp., Mr. Parsons examined these predictions to ascertain how they would fit the year 1945.

In the first twelve months after X-day construction activity is likely to approximate the volume of building for the year 1938 when the contract value for thirty-seven states east of the Rocky mountains was \$3,197,000,000. The final total for 1944 for these states will be a little in excess of \$2,000,000,000.

There are now four temporary bottlenecks upon which building expansion depends that must be overcome. They are government controls, price lines, and material and manpower shortages. Wartime controls on construction volume are of six kinds: (1) Limitation orders forbidding all but the approved categories of essential construction, (2) raw material allocations and production controls which limit over-all quantities of materials available, with rationing of scarce materials for essential use; (3) manpower regulations, (4) price ceilings, (5) wage regulations and (6) rent controls.

Relaxation of the construction limitation orders began last October, when the National Housing Agency announced the loosening of certain restrictions on the use of materials for new homes. Rent ceilings applied on an area basis will probably be lifted in the same way. Until such time, however, little rental housing construction will be undertaken.

In addition to the removal of government controls, there will be for some time after X-day the question of adequate supplies of certain construction equipment and materials. Dimension lumber and items made from fabricated metals will continue to be scarce, but masonry materials of all kinds will probably be in ample supply.

During the time of material shortages, price problems also exist. To

what extent these price controls will continue after X-day depends on the policy in use and its administration. Confusion in price trends may be created after all controls are lifted. If, during the transition period, self-control on the part of the manufacturer, contractor and labor can hold down building costs, the investing public will be assured and recovery will be facilitated. Industry has the continuing obligation to watch material prices, wages and other construction costs through the transition period and thereafter.

While there is unemployment among craftsmen in certain trades and in particular localities even now, and many returning veterans who were not previously employed in construction work have acquired in their army and navy training skills qualifying them for this work, there are still many men in the armed service and in war work who will not be available in sufficient number even after V-E-day.

The construction revival will fall into three phases. The reconversion phase will last three to six months after X-day. Deferred maintenance, repairs, alterations and modernization will move ahead as quickly as men and materials become available. The second phase will consist chiefly of accumulating contracts for new construction, with an increase in the variety and number of projects. The last phase, mainly apartment and of-

fice space construction, will begin after rent controls are lifted and after building costs become relatively stabilized, giving assurance to investors that such projects can safely proceed.

In contrast to its present state, the postwar outlook for housing construction is one of the brightest spots in the whole building picture. Various estimates of the new dwelling units needed after the war range from 500,000 to 2,000,000 annually for years to come. Actual postwar value, however, will depend on costs and money available. The necessity of offering better houses at lower costs seems to be generally realized throughout the industry. The Dodge Corp. states that an average of 820,000 dwelling units of all types will be constructed annually in the postwar decade.

Future construction markets will lie in the following types of building: (1) A preponderance of one and two-family private houses in the middle-price range, (2) store alterations and factory buildings, (3) apartment buildings and office space after rent controls are lifted, (4) school and science buildings, particularly the modernization of old buildings; (5) church and recreational buildings, studios, theaters and multifamily dwellings.

FIRE early this month at the home quarters of the Redwood Fibre Products Co., Santa Cruz, Cal., may handicap for a time the shipment of the company's redwood bark product, Sani-Soil.



**SHERWOOD NURSERY CO.**  
EVERGREENS - Propagators & Growers  
141 S. E. 65th Ave., PORTLAND 16, ORE.

**MAHONIA  
AQUIFOLIUM**

A Broadleaf Evergreen hardy anywhere.

2-year Seedlings  
\$5.00 per 100; \$40.00 per 1000.

Liberal count on seedlings, and no package charge, if check is sent with order.

**MOUNT VERNON NURSERY**  
Mount Vernon, Wash.

**Ready for immediate shipment:**

**PEACHES**  
Belle of Georgia, Elberta, Early Elberta, Gage Elberta, Golden Jubilee, Rochester.

**APPLES**  
—Assorted 1-yr.

**Boysenberries**  
Strawberries—Banner, Marshall, Narcissus, New Oregon, Brightmore.

**SHADE TREES**  
Birch—European and White.  
Elm—Chinese and Corkbark.  
Golden Chain (Laburnum)—Vulgare.  
Horse Chestnut—Red and Pink.  
Maple—Norway, Silver and Sycamore.  
Mountain Ash.  
Plane Tree—European.  
Oak—Red, Scarlet and Pin.  
Willows—Golden and Wisconsin.

**SHRUBS**  
Almond—Pink-flowering.  
Lilacs—In variety.  
Forsythia.  
Cydonia, etc.

Write for Catalog.

**RICH & SONS NURSERY**  
Rt. 4 Hillsboro, Ore.

## NEW PLANT PROTECTION PRODUCTS.

[Continued from page 11.]

secticide. House flies, when they alight on a surface that has been sprayed with DDT, seem to get paralysis of the extremities, and this gradually creeps up to the vital organs, when the fly just turns over on its back and dies.

### DD for Nematodes.

DD is not to be confused with DDT. DD is a by-product of the oil industry and consists of a mixture of dichloropropylene and dichloropropane. When emulsified and watered on the soil, this has proved to be an excellent control for nematodes. It is at present undergoing extensive tests here and there throughout the country. The emulsified DD is mixed at the rate of approximately six ounces to 100 gallons of water, and the dose is one gallon per square foot, giving a dose of actual DD of about one and three-quarters cubic centimeters per square foot.

Preliminary reports seem to show that this material will do a good job in control of nematodes, its only drawback being the large amount of water which has to be used in applying it.

Of course, DD is quite toxic to plants, and the soil should be treated while the ground is fallow and no planting should be done for a minimum of ten days thereafter. Soil temperature should not be less than 55 degrees when treatment is undertaken.

### Dithane.

Another promising item is Dithane, a product of Rohm & Haas Co., Philadelphia. It seems to work on an entirely different principle than anything we have had heretofore. Dithane is diluted and watered on the soil around the growing plants, whence it is taken up by the roots and permeates the stems and foliage. Both the chewing and sucking insects which attempt to injure the plants which have been so treated receive a lethal dose. It is said to be exceptionally good for certain insects, including Mexican bean beetles.

Another product which works on practically the same principle as Dithane and is so far unnamed is also watered on the soil and provides excellent protection against red spiders, mites, thrips, aphids, etc., on ornamental and flowering plants, but this material is quite toxic and cannot be used on food crops. One application, according to report, will protect chrysanthemums, snapdragons

## PORTLAND WHOLESALE NURSERY CO.

306 S. E. 12th AVENUE Avery H. Steinmetz PORTLAND, OREGON

### Quality Stock

CONIFERS AND BROAD-LEAVED  
EVERGREENS  
SHADE AND FLOWERING TREES  
FRUIT TREE SEEDLINGS  
FRUIT TREES  
DECIDUOUS SHRUBS  
VINES AND BULBS  
PORTLAND ROSES

**BARTLETT PEAR SEEDLINGS**  
(Washington-grown)

17,000 1/4-in. br.	\$32.00
6,000 No. 1, str.	23.00
15,000 No. 2, br.	20.00
12,000 No. 2, str.	17.00
10,000 No. 3	14.00

**APPLE SEEDLINGS**  
(Portland-grown)

10,000 No. 2, br.	\$18.00
20,000 No. 3	12.00

*Write for our Catalog*

### A. MCGILL & SON

FAIRVIEW, OREGON

*Wholesale Only*

### GOOD WESTERN-GROWN NURSERY STOCK

Fruit Tree Seedlings  
Flowering Ornamental Trees  
Shade Trees

Grown right and packed right.  
Combination carloads to Eastern  
distributing points will save you  
on freight.

### MILTON NURSERY CO.

A. Miller & Sons, Incorporators

MILTON—Since 1878—OREGON

### OUR SPECIALTIES

Birches—Flowering Cherries, Crabs and  
Plums—Chinese Elm—Hawthorns—Li-  
lacs—Lindens—Flowering and Globe  
Locusts—Columnar, Globe, Norway and  
Schwedler Maples—Mountain Ash—Ore-  
gon Grape—Oriental Plane—Willows.

**SEND US YOUR WANT LIST  
FOR QUOTATIONS**

Combination Carloads to Eastern dis-  
tributing points at minimum freight  
cost.

### AS ALWAYS— OREGON'S BEST SOURCE of GOOD ROSES

Our limited crop is reserved for  
our regular customers this year.

### PETERSON & DERING

*Wholesale Rose Growers*  
Scappoose, Oregon

### OREGON-GROWN NURSERY STOCK

We have a complete line of shade and  
flowering trees, both whips and heavier  
branched stock.

Flowering Cherries, Flowering  
Crabs, Plums and Locusts,  
Norway and Wiers Maples,  
Oaks—Chinese Elm—Mountain  
Ash—Birch—Hawthorns.

### DOTY & DOERNER, INC.

6091 S. W. Capitol Highway  
PORTLAND 1, OREGON

### BALED SHINGLE TOW

(CEDAR SHAVINGS)

### WM. A. JOHNSTON

408 Postal Bldg., Portland 4, Ore.

### NOTICE

Decreased production makes it impos-  
sible to book orders for new customers.  
For the duration the limited supply is  
reserved for our regular trade.

**HOWARD ROSE CO.**  
Hemet, California

### PACIFIC COAST NURSERY

Specializing in fruit tree seedlings  
since 1914. We also have Norway  
and Schwedler Maple, Chinese Elm,  
European White Birch, Cut-leaf  
Weeping Birch, Paul's Scarlet Haw-  
thorn and Kwanzan Flowering  
Cherry. All 2-yr.-old stock.

**John Holmason, Prop.**

2244 N. Skidmore Ct.  
Portland 11, Oregon



and other cut flower crops practically during the entire season (most of the work done with this new material has been on greenhouse cut flower crops). It has been used with marked success for the control of red spiders and other pests on potted hydrangeas, but much is still to be learned as to its possibilities.

#### Dowfume.

Another new product which is coming to the fore is Dowfume. This, unlike DD, is injected into the soil. It consists of methyl bromide, ethylene dichloride and carbon tetrachloride. It is an excellent nemacide for the preparation of potting soil for such items as are subject to nematodes. It is simple to sterilize the soil by filling a 50-gallon open-end drum three-quarters full and putting two or three holes down into the soil with a crowbar and pouring in a few cubic centimeters of Dowfume, then covering the drum and allowing it to stand for a few days. The soil is then taken out and spread on a clean surface to allow thorough aeration. The soil should not be used for potting for about ten to fifteen days.

#### Aerosols.

No doubt, many of you have read in newspapers and magazines recently about aerosols, or the so-called aerosol bombs. The aerosol bomb substantially is a brass container which withstands quite high pressures and into which is loaded two per cent pyrethrum, eight per cent oil of sesame and ninety per cent Freon 12, which, you may recall, was prior to the war and still is one of the leading refrigerants. The Freon develops at 80 degrees Fahrenheit about ninety pounds pressure per square inch, and as the small valve on the upper part of the bomb is pressed or turned the insecticide is driven out through a nozzle by means of the pressure within. Thus the driver, or Freon, takes the place of compressed air, which in the old-type sprayers was furnished either by hand power or mechanical means.

The method of dispensing insecticides by aerosols was developed largely by Dr. Lyle D. Goodhue and has proved a great boon to our fighting men, especially in the Pacific, where the malaria mosquito is so plentiful. An aerosol bomb containing a total weight of about one pound will treat a room of sizable cubic volume, and whereas tests seem to indicate that the knockdown is not so rapid as with the regular spray gun, the effect seems to be much more lasting, and the final count really shows that there are just as

**I'M THE LITTLE GUY  
GARDENERS TRY  
THEN CONTINUE TO BUY**



Why? Because Palco Pete's Mulch fills a definite garden need—and it's backed by consistent advertising in leading national magazines and metropolitan newspapers. Complete merchandising support with effective sales help also provided. Builds steady year 'round repeat sales with an attractive margin of profit. Improve your sales by improving soils.

THE  
NATIONALLY  
ADVERTISED  
SOIL  
CONDITIONER

WRITE TODAY  
FOR FULL DETAILS

**Palco Pete's  
MULCH**

SAN FRANCISCO • CHICAGO • NEW YORK • LOS ANGELES



### PACIFIC LUMBER CO.

100 Bush St.

San Francisco, Calif.

### NANKING CHERRY

(Prunus tomentosa)

4 to 5 ft., bushy, own root, 45c  
\$40.00 per 100.

### Juniperus Scopulorum

2-yr. Seedlings

	Per 100
12 to 14 ins.	\$10.00
8 to 12 ins.	8.00

Packing at cost.

**ROCKMONT NURSERY**  
Boulder, Colo.

### PFITZERS

**An outstanding planting  
of Finished Trees.**

24 to 30 to 36 ins.  
also smaller sizes.  
Beautiful stock R&B

Shipment in moss, if preferred, individually wrapped or bulked.

Also Tamariscifolia, various Pines, Concolor Fir, Colorado Blue Spruce, Colorado Silver Cedar, etc.

**HIGH VALLEY FARM**  
Colorado Springs, Colo.

**SURPLUS STOCK**—Quotations subject to prior sale.

Russian Olive Seedlings	Per 1000
1,100 12 to 18 ins.	\$20.00
11,000 18 to 24 ins.	30.00
Green Ash Seedlings	
2,000 18 to 24 ins.	20.00
Ponderosa Pine Transplants, 2-2	
7,000 12 to 18 ins.	55.00

**CHRISTIANSON LANDSCAPE SERVICE**  
Fargo, N. D.



**BLUE  
SPRUCE**

	Per 1000
2-yr., 2 to 4 ins.	\$10.00
3-yr., 3 to 5 ins.	18.00
4-yr., 4 to 8 ins.	22.00

We Grow 14,000,000 Trees Per Year.  
Write for Complete List.

**MUSSER FORESTS, INC.**  
INDIANA, PENNA.

### WANTED

Lining-out Stock

1000 Platanus orientalis  
1000 French Hybrid Lilacs  
1000 Redleaf Barberry  
500 Boston Ivy

Please quote on any part.

**KIRKLAND NURSERY CO.**  
Bountiful, Utah.

### Colorado-Grown CHINESE ELM

Ulmus Pumila, trees  
and seedlings, all sizes.

**SWINK NURSERY**  
R.F.D. 3, La Junta, Colo.

**CALENDULA—Giant Mixed**  
Buyny and Buyny Quality Plants

## Bed, Flat or Pot LABELS WITH VARIETIES PRINTED ON

Any Name—Botanical and Common—as well as YOUR NAME if wanted, that can be printed on 4, 5 or 6-inch pointed labels, on orders for 5000 or more—in multiples of 100 or 200, and so on, of a name.

Prices below are delivered in Ariz., Calif., Colo., Idaho, Kans., Nev., N. Mex., Okla., Tex., Utah and Wash. From others add 12½ per cent.

Prices per 1000: 5000 to 10,000, \$4.00. 11,000 to 25,000, \$3.75. 26,000 to 50,000, \$3.50. 51,000 to 100,000, \$3.25. 100,000 and more, \$3.00—Delivered.

In these busy days of scarce help and high labor costs, who can afford to hand-print or stamp or write varieties on blank labels when they can be obtained ALREADY PRINTED in quantities and at prices listed above?

- Allow five (5) weeks for delivery AFTER we receive your order.
- Terms: Please pay with order for labels with YOUR NAME printed on them.

Manufacturers

**RICHARDSON LABEL CO.**

Wholesalers

3314 West Washington Blvd.

Los Angeles 16, Calif.

many, if not more, dead insects after ten or fifteen minutes.

It is perfectly possible, with the aerosol as we now have it, to stand in the center of a 20-foot room and in a few seconds spray the entire room from a central point. Aerosols which I have made throw a mist for a distance of about fifteen to eighteen feet.

Here, definitely, we have something which will find a large post-war market, especially for the spraying of greenhouses and other buildings. Outdoors it is probable that a heavier type of oil will be necessary than that at present used.

There are, of course, other drivers or pressure agents which can be used in the making of aerosols, but most of them, unlike Freon (dichlorodifluoromethane), have some slight fire hazard or are more toxic.

Other materials than pyrethrum have been used in experimental work with aerosols, for instance, nicotine, DDT and oleic acid. In some of these tests severe injury has occurred to plant life, so that considerable more work is still necessary.

Aerosols have been used by the scientists of the Boyce Thompson Institute for Plant Research and others in applying plant hormones for the fertilization of such things as tomato crops. In some cases severe damage to the foliage has resulted, perhaps due to the rapid drop in temperature when the aerosol is released too close to the plant, but work is still continuing along this line.

[Continued on page 36.]

## SPRAY CHEMICALS AND APPLICATION EQUIPMENT

A Handbook of the Insecticide-Fungicide  
Industry and Chemical Application Equipment

By J. A. McClintock and Wayne B. Fisher

Part one gives the interesting historical background of many chemicals and tells how they are manufactured. Describes methods of using spray chemicals, discusses insects and diseases controlled by the specific chemicals and relates methods of improving present pest control practices.

Part two describes almost every type of sprayer and duster available to the public for use in applying spray chemicals. About 300 illustrations are included in this section, and all types of equipment are shown, ranging from the simplest atomizer sprayer to the largest commercial equipment.

Large page size, 8½x11 inches. More than 300 pages, over 500 illustrations. Bound in maroon cloth.

Price, \$4.00 per copy

For sale by

**AMERICAN NURSERYMAN**

343 S. Dearborn St., Chicago 4, Ill.

## BIRCH, CUT-LEAF WEEPING

A fine lot of trees, well shaped with fibrous roots.

	Per 10	Per 100
8 to 9 ft., branched.....	\$16.00	\$145.00
9 to 10 ft., branched.....	18.00	165.00
10 to 12 ft., branched.....	21.00	190.00

**PORTER-WALTON CO.**

Salt Lake City,

Utah

## CLASSIFIED ADS

Five lines, \$1.00,  
each additional line 20 cents,  
per insertion.

### BERRY PLANTS

**STRAWBERRY PLANTS**  
Certified, 4,000,000 Blakemore, Klondike, Aroma and Dunlap. Grown on new land. Excellent quality. Orders booked for fall and spring delivery. \$7.50 per 1000, 25 per cent deposit with order. Due to the shortage of strawberry plants, we advise you to book your order at once.

**ROMINES PLANT FARM**  
Dayton, Tenn.

**BERRY PLANTS**  
St. Regis Raspberry plants, \$45.00 per 1000. Eldorado Blackberry plants, \$35.00 per 1000. Lucetia Dewberry plants, \$35.00 per 1000. Black Diamond Thornless Boysenberry plants, \$45.00 per 1000. 1-yr. cultivated Blueberry plants, \$40.00 per 100. Cranberry plants, Herba, Sweet Potato seed. List sent.

**WARREN SHINN,** Woodbury, N. J.

### BERRIES

Boysenberries and Youngberries, \$7.00 per 100, \$65.00 per 1000. Cumberland, St. Regis and Latham Raspberries, \$5.50 per 100, \$50.00 per 1000. Blakemore Strawberries, \$10.00 per 1000.

**WAYNESBORO NURSERIES,** Waynesboro, Va.

**STRAWBERRIES**  
Brune's Marvel, very sweet, new everbearing. Plants, \$3.50 per 100; \$25.00 per 1000. Streamliner, very large, new everbearing, \$7.50 per 100, F.O.B. Lebanon.  
**GEO. A. MITSCH** Lebanon, Ore.

**STRAWBERRY PLANTS**  
Brune's Marvel and Gemxata Everbearing. Two new and worth-while Everbearing plants, \$4.50 per 100, \$30.00 per 1000, 25 years supplying the trade with good plants.  
**DOLLAR NURSERY,** Bloomfield, Ia.

**THE NEW STREAMLINER EVERBEARING.**  
World's largest strawberries. 250 plants, \$22.50. Fruiting time will tell the story. List them in 1946; over 20 nurseries will. Catalog.  
**OAK HILL NURSERY,** New Buffalo, Mich.

**STRAWBERRY PLANTS**  
Brune's Marvel Everbearing. A new and worth-while everbearing plant, \$4.50 per 100, \$30.00 per 1000. 25 years supplying the trade with good plants.  
**DOLLAR NURSERY,** Bloomfield, Ia.

**GEM EVERBEARING STRAWBERRY STOCK PLANTS.**  
Also the earliest White Seed Potatoes. America's finest, bar none. Why not plant the best, direct from the originator to you?  
**FRANK J. KEPLINGER,** Farwell, Mich.

**STRAWBERRY PLANTS**  
Certified; hardy, northern-grown Dunlap. \$10.00 per 1000. Fresh plants. Prompt shipment.  
**IOWA NURSERY,** Farmington, Ia.

**THORNLESS BOYSENBERY YEARLINGS.**  
\$2.10 for 14. Ten 2's or six 3-yr. plants, \$2.00. 10 per cent postage.

**R. H. DIXON**  
R. 1, Hutchinson, Kans.

**CUMBERLAND RASPBERRY, No. 1 Tips.**  
\$4.00 per 100, \$30.00 per 1000. No packing charge.  
**BLUE RIDGE GARDENS** Roanoke, Va.

### BULBS

**CANNAS, Red, Pink, Yellow; \$7.00 per 100. GLADS, mixed, 2 to 3 ins., \$3.00; 1½ to 2 ins., \$2.00.**

**BRUENING'S NURSERIES** Higginsville, Mo.

### EVERGREENS—Specimen

**SPECIMEN EVERGREENS for Landscape and Store Trade.**  
Special prices on Savin, Irish, Swedish, Chinese, Scopulorum and Pfitzer Junipers. Also Pyramidalis and Globe Arborvitae. Write for price list.

**HENRY NURSERIES, Henry, Ill.**  
**SPECIMEN EVERGREENS, good shape and size at less than wholesale in carload and truckload lots, F.O.B. our nursery.** Spruce; Colorado, Norway and White. Pine: Mugho, Scotch, Austrian, American Red and White. Also Ash, Elm and Viburnum lentago.  
**PEQUOT NURSERY,** Pequot Lakes, Minn.

**JUNIPER PFITZER and HIBERNICA**  
These from a new block grown on clay loam soil. Truck or carlot only.

**HUMPHREYS LANDSCAPE SERVICE** Mt. Sterling, Ky.

### EVERGREENS

Surplus stock. Orders will be filled in the order received. Terms: 25 per cent cash with your order, balance on delivery. 30 days net to firms that have established credit with us.  
Austrian Pine, 2148 3 to 4 ft. .... \$1.00  
1725 4 to 5 ft. .... 1.25  
655 5 to 6 ft. .... 1.50  
White Pine, 1255 5 to 6 ft. .... .90  
766 3 to 4 ft. .... 1.00  
Mugho Pine, 1264 12 to 15 ins. .... 1.00  
Douglas Fir, 827 18 to 24 ins. .... .90  
125 24 to 30 ins. .... 1.25  
Fraser Fir, 75 3 to 4 ft. .... 2.50  
26 4 to 5 ft. .... 3.50

Berkmans Golden Arborvitae, 655 15 to 18 ins. .... .90  
234 18 to 24 ins. .... 1.00  
Baker Arborvitae, 218 24 to 36 ins. .... .90  
76 36 to 48 ins. .... 1.00  
White Spruce, 367 24 to 30 ins. .... .90  
Juniperus virginiana, 768 2 to 3 ft. .... 1.00  
432 3 to 4 ft. .... 1.10  
234 4 to 5 ft. .... 1.25  
226 5 to 6 ft. .... .90  
Juniperus stricta, 3456 18 to 24 ins. .... 1.00  
532 30 to 36 ins. .... 1.25  
Pollish Juniper, 987 18 to 24 ins. .... .90  
278 24 to 30 ins. .... 1.00  
187 30 to 36 ins. .... 1.25

All stock B&B. We cannot secure lumber for boxing, so must ship in truck or carload. We can use some Roses, Perennials and Fruit Trees if you have a surplus of first-class stock.

**OLD ORCHARD GARDENS**  
724 E. Big Bend Rd., Webster Groves, Mo.  
Tel. Webster 7470

**EXQUISITE DAPHNE ODORA.**  
Large, well budded plants. Wholesale and retail. Prices on request.

**ROY WILKINS** Newberg, Ore.

### EVERGREENS—Lining-out

**SURPLUS LINERS**

Seedlings	Per 100	Per 1000
Austrian Pine	3-yr., 6 to 12 ins.	\$5.00 \$35.00
White Pine	5-yr., 7 to 14 ins.	4.00 30.00
Oriental Red Pine	4-yr., 12 to 24 ins.	4.00 30.00
Douglas Fir, glauca	4-yr., 6 to 12 ins.	5.00 35.00
Balsam Fir	4-yr., 4 to 8 ins.	5.00 30.00
Colorado Blue Spruce	3-yr., 3 to 6 ins.	2.50 15.00
4-yr., 4 to 10 ins.	3.00 22.00	
Hondo Spruce, Norway type	4-yr., 4 to 8 ins.	2.00 18.00
American Arborvitae	4-yr., 6 to 10 ins.	4.00 30.00
Oriental Bittersweet	4-yr., 24 to 36 ins.	6.00
Transplants		
Norway Red Pine	4-yr., 5 to 10 ins.	6.00 40.00
White Pine	4-yr., 5 to 8 ins.	4.00 30.00
White Spruce	5-yr., 8 to 16 ins.	8.00
Norway Spruce	5-yr., 8 to 16 ins.	8.00
4-yr., 2-1, 7 to 10 ins.	10.00	
Douglas Fir	5-yr., 4 to 10 ins.	6.00
Colorado Blue Spruce	4-yr., 3 to 8 ins.	6.00
Canadian Hemlock	6 to 10 ins.	15.00
Good roots, well packed. Minimum \$10.00.		
Cash with order.		

**SUNCREST EVERGREEN NURSERIES** Johnston, Pa.

### LINING-OUT STOCK

Abies concolor, 3-yr. sdigs.	100	1000
Douglas, 3-yr. sdigs.	3.50	30.00
Balsam, 3-yr. sdigs.	2.50	30.00
Ilex crenata, 3-yr. sdigs.	4.00	35.00
Picea alba, 4-yr. sdigs.	3.50	30.00
Excelsa, 4-yr. sdigs.	3.00	25.00
Pungens, 4-yr. sdigs.	3.50	30.00
Pungens, 3-yr. sdigs.	3.00	25.00
Pinus Mugho, 3-yr. sdigs.	5.00	45.00
Strobus, 3-yr. sdigs.	3.00	25.00
Sylvestris, 3-yr. sdigs.	3.00	25.00
Tsuga canadensis, 3-yr. trans.	6.00	60.00
Canadensis, 3-yr. trans.	9.00	80.00
Carolina, 3-yr. trans.	10.00	90.00
Taxus cuspidata, 2-yr. trans.	16.00	150.00
Capitata, 2-yr. trans.	16.00	150.00
Hicksii, 2-yr. trans.	16.00	150.00
Hathfield, 2-yr. trans.	16.00	150.00
Can. stricta, 2-yr. trans.	16.00	150.00
Acer pol. atrop. grafts 2½-in. pot.	75.00	700.00
Moerheim Blue Spruce, grafts 2½-in. pot.	75.00	700.00
Koster Blue Spruce, grafts 2½-in. pot.	75.00	700.00
1-yr. field-grown	100.00	700.00

**VERKADE'S NURSERIES,** Wayne, N. J.

**COLORADO BLUE SPRUCE, 4-yr. sdig., 4 to 6 ins., \$15.00 per 1000. Black Spruce, 5-yr., tr., 8 to 12 ins., \$35.00 per 1000. Balsam Fir, 5-yr., tr., 4 to 8 ins., \$35.00 per 1000. No C.O.D. Cash, please.**

**JOHN ZELENKA** Grand Haven, Mich.

Arborvitae, Pyramidal	Per 25	Per 100
4 to 6 X.	\$3.00	\$10.00
4 to 8 X.	3.75	12.50
Arborvitae, American		
8 to 12 X.	3.75	12.50
Juniper, Andorra, 6 to 8 X.	3.00	10.00
8 to 10 X.	3.75	12.50
Juniper, Savin, 4 to 6 X.	3.50	8.00
Retinospora obtusa, crippal		
6 to 8 X.	3.75	12.50
Juniper, Chinese, 6 to 8 X.	4.25	15.00
8 to 10 X.	6.00	20.00
10 to 15 X.	6.75	25.00
Japanese Spreading Yew		
4 to 6 X.	3.00	10.00
6 to 8 X.	3.75	12.50

**ESHAM'S NURSERIES,** Frankford, Del.

**EVERGREEN SEEDLINGS**  
As low as \$8.00 per 1000. Larger sizes also. List on request.

**BRADEN NURSERY** South Windham, Me.

**EVERGREEN, AMUR RIVER PRIVET,** Southern type. 3-yr., 2 to 3 ft., heavily branched, \$8.00 per 100; 3 to 4 ft., \$12.00 per 100.

**Waynesboro Nurseries, Waynesboro, Va.**

**LINING-OUT STOCK and ROOTED CUTTINGS.** Send for list.

**LUTHER P. CREASY NURSERIES** Catawissa, Pa.

**WAXLEAF LIGUSTRUM LINERS** From 2½-in. rose pots.

\$10.00 per 100, \$80.00 per 1000.

**TRAUBENICHT NURSERY CO.** 400 N. Sylvania Ave., Fort Worth 3, Texas

**IRISH JUNIPER FASTIGIATA** Transplanted, 1-yr., field, 6 to 9 ins.

\$100.00 per 1000.

**NICK'S NURSERY,** Anchorage, Ky.

### HARDY PLANTS

**NEW NOVELTIES.**  
Penstemon, Cherry Glow (Firebird), ruby crimson; pots, \$3.00 per 12, \$18.00 per 100.  
Pyrethrum, Pink Bouquet, choice double pink; pots, \$3.00 per 12, \$18.00 per 100.  
Violet, Royal Robe, unusually large violets; pots, \$3.00 per 12, \$18.00 per 100.  
Veronica, Blue Spire, deep blue spikes; pots, \$2.50 per 12, \$15.00 per 100.  
Veronica incana, woolly blue flowers; pots, \$2.50 per 12, \$15.00 per 100.

**WONDERFUL... NEW**  
Pink Forget-me-not.  
**MYOSOTIS, PINK BEAUTY,** excellent color, compact plants; hardy perennial; pots, \$3.00 per doz., \$18.00 per 100.

**OUTDOOR CARNATIONS.**  
Dianthus, Rock Raven Red, double, rich crimson; pots, \$3.50 per doz., \$20.00 per 100.  
Dianthus, Silvermine, double, pure white; pots, \$2.50 per doz., \$15.00 per 100.

**THE BEST NEW ASTERS.**  
Pots Per 12 Per 100  
Beechwood Challenger, crimson, \$3.00 \$18.00  
Blue Moon, blue novelties, \$3.00 \$18.00  
Harrington's Adorable, pink, \$3.50 20.00  
Palmyra, pure pink novelties, \$3.00 18.00  
Violetta, deep violet-purple, \$3.50 20.00

**CORLISS BROS., INC. NURSERIES** 302 Reynard St., Gloucester, Mass.

**MARCONI AND ESTHER READ DAISY** Root Divisions

Marconi, \$10 per 100, \$90 per 1000.

Eather Read, \$8.00 per 100, \$75 per 1000.

These are large divisions. Packed and shipped to reach you in first-class condition, by L. E. COOKE, 417 Viata St., San Gabriel, Cal.

**FASHION CUSHION MUMS.** Red, white, pink, bronze, yellow.

\$4.00 per 100, \$37.50 per 1000.

Send for our CHRYSANTHEMUM catalog.

**WONDERLAND NURSERIES,** Ellersson, Va.

**RED YUCCA**  
Blooms all summer; hardy to zero; protect it to 15 below. Retail size, 15c; liners, 12 to 18 ins., 7½c.

**NOBLE NURSERY, NOBLE, OKLA.**

**TRITOMA.** Blooms from early spring to frost. Large root divisions. \$3.00 per 10, \$25.00 per 100.

**JOHN M. BAILA NURSERY** Box 315, Aberdeen, Wash.

**VINCA MINOR**  
Bowles variety, 6 to 12 ins. Many runners. Excellent growth. \$10.00 per 100.

**SYLVANIA NURSERY & PEAT CO.** New Galilee, Pa.

**HARDY CHRYSANTHEMUMS**  
Field clumps and field-rooted divisions. See our complete list in the March 1 issue.

**FOX NURSERY** Elkhart, Ind.

**HARDY CHRYSANTHEMUMS**  
Send for our list of 33 fine, hardy varieties. Cultural notes on cut flowers and pot plants.

**C. C. BRECE,** Delaware, Ohio



## CHRYSAETHUMS

Hardy, garden, cut flower and cushion types. Hemerocallis, Perennials, bulbs; field-grown, \$2.50 to \$3.00 per 100, F.O.B. List.  
MRS. R. GABLE, Haralson, Ga.

BUDDLEIA, Charming, Dubonnet and Ile de France; 2-yr., No. 1, 30c in lots of 10 or more.  
Waynesboro Nurseries, Waynesboro, Va.

## NUT TREES

## HARDY GRAFTED NUT TREES.

Crath Carpathian English Walnut, Black Walnut, Butternut, Heartnut. Orders for less than 10 not accepted. Price list on request.

## BERNATH'S NURSERY

R. D. 1 Poughkeepsie, N.Y.

## ROOTS

## HORSE-RADISH PLANTS

(Root Cuttings)  
State Inspected.

Selected plants, 8 to 12 ins. long.

	Per 100	Per 1000
3/16-in. and up.....	\$1.50	\$12.50
5/16-in. and up.....	2.00	16.50
3/8-in. and up.....	2.50	20.00

Less 2 per cent for cash with order.

These are strong, clean, healthy plants and shipped to order.

## RANDOLPH MARKET NURSERY

808 W. Randolph St., Chicago 7, Ill.

## GARDEN ROOTS

1-yr. Mary Washington Asparagus roots, \$13.50 per 1000, 2-yr. irrigate per 1000: 3-yr., extra size, \$25.00 per 1000. Myatt's Linnean Rhubarb, whole roots, 1-in., \$12.00 per 100; 1/2 to 1 whole Myatt's Rhubarb roots, \$10.00 per 100. Horse-radish roots, \$12.00 per 1000. Witloof Chicory roots, \$2.00 per 100, \$15.00 per 1000. List sent.

## WARREN SHINN

Woodbury, N. J.

25,000 MARY WASHINGTON ASPARAGUS. 1-yr., good size, healthy crowns. Will be dug, bunched in 25, packed in peat and shipped in April.

500 for \$6.50, 1000 for \$12.00.

A. E. GUSTAFSON, Box 367, Pine City, Minn.

## VICTORIA RHUBARB SEEDLINGS

1/2 to 1-in. cal. Good lining-out stock. \$20.00 per 1000. Available for immediate shipment.

## KRIEGER'S WHOLESALE NURSERY

Bridgman, Mich.

## MARY WASHINGTON ASPARAGUS ROOTS.

1-yr., good size, healthy crowns. Will be dug, bunched in 25, packed in peat and shipped in April.

## ROY WILKINS

Newberg, Ore.

## FRESH MARTHA WASHINGTON ASPARAGUS SEED.

5 lbs., \$8.75. Hardy rooted MUMS, 400 for \$15.00; assorted colors. Phlox subulata, 300 for \$15.00.

WM. E. WENTZEL NURSERY, Sewell, N. J.

## SEEDS

Nandina seed, 5 lbs., \$5.00.

Cherry Laurel and Ligustrum japonicum,

## PIGFORD NURSERIES

Lumberton, Miss.

## PEACH PITS

Southern collected, high germination, \$3.00 bu. Peach seedlings for budding or grafting. \$25.00 per 1000. 100,000 Boxwood. Prices right. RIVERDALE NURSERIES, Riverdale, Ga.

## SHRUBS AND TREES

## SHADE TREES

	Each	Per 10	Per 100
Apple, specimen trees, 2 to 2 1/2-in. cal.....	\$3.25	\$30.00	....
Ash, European Mountain, 6 to 8 ft.....	1.00	9.00	....
8 to 10 ft.....	1.35	12.50	....
Birch, Cutleaf Weeping, 8 to 10 ft.....	2.50	22.50	....
10 to 12 ft.....	3.00	27.50	....
2-in. cal.....	4.00	37.50	....
Elm, American, 8 to 10 ft.....	1.40	13.00	....
Chinese, 8 to 10 ft.....	1.30	12.00	....
Linden, Littleleaf, 8 to 10 ft.....	2.25	21.00	....
Magnolia soulangeana, B&B, 4 to 5 ft.....	4.00	37.50	....
Maple, Norway, 3 1/2 to 4-in. cal.....	6.00	50.00	....
Oak, Pin, Red, White and Chestnut, 8 to 10 ft.....	3.00	27.50	....
Poplar, Lombardy, 6 to 8 ft.....	3.50	30.00	....
8 to 10 ft.....	5.00	45.00	....
10 to 12 ft.....	7.50	65.00	....
Willow, Weeping, 6 to 8 ft.....	7.50	65.00	....
8 to 10 ft.....	9.00	80.00	....

Write for quotations on other varieties and sizes.

## WAYNESBORO NURSERIES

Waynesboro, Va.

## LINING-OUT STOCK

EUONYMUS PATENS, true berried type, 8 to 10-in., field-grown plants; \$5.50 per 100, \$75.00 per 1000. SPIRAEA FROEBELI, rooted cuttings from sand; \$3.00 per 100, \$25.00 per 1000. Prepared for cash with order. Satisfaction guaranteed.  
PRITCHARD NURSERIES, Ottawa, Kan.

## EVERGREENS — SHRUBS — TREES

## Lining-out Evergreens

All evergreens listed have grown in wide nursery rows except where noted. Deduct 10 per cent for 1000 rate.

## JUNIPERS

	Per 100
Andorra 9 to 12 ins., sp., XX f.g.....	\$18.00
12 to 15 ins., sp., XX f.g.....	25.00
Pathfinder 18 to 24 ins., XXX f.g.....	75.00
2 to 3 ft., XXX f.g.....	100.00
Pfitzer 6 to 9 ins., X out of flats.....	12.00
6 to 9 ins., sp., XX f.g.....	17.00
9 to 12 ins., sp., XX f.g.....	20.00
12 to 15 ins., sp., XXX f.g.....	32.00
15 to 18 ins., sp., XXX f.g.....	40.00
18 to 24 ins., sp., XXXX f.g.....	55.00

Savin, same price as Pfitzer.

## JUNIPERS—FOR BENCH BALLING.

Nice bushy stock, dug bare-root, potted and packed in moss.

	Per 100
Andorra 12 to 15 ins., sp.....	\$60.00
Admirabilis 12 to 15 ins., sp.....	60.00
15 to 18 ins., sp.....	75.00
Pfitzer and Savin 15 to 18 ins., sp.....	75.00
18 to 24 ins., sp.....	100.00
2 to 2 1/2 ft., sp.....	125.00

## TRANSPLANTED TREES AND SHRUBS

Deduct 10 per cent for 1000 rate.

## CRAB, HOPA and Theliera

4 to 5 ft., \$65.00; 5 to 6 ft., \$75.00.

## LOMBARDY POPLAR, low-branched

3 to 4 ft., \$6.00; 5 to 8 ft., \$25.00.

4 to 5 ft., \$8.00; 8 to 10 ft., \$30.00.

5 to 6 ft., \$10.00; 10 to 12 ft., \$40.00.

## REDBUD

4 to 5 ft., \$70.00; 6 to 8 ft., \$100.00.

5 to 6 ft., \$75.00; 8 to 10 ft., \$150.00.

## SPIRAEA VANHOUTTE

12 to 18 ins., \$8.00; 18 to 24 ins., \$10.00.

## HARDWOOD CUTTINGS

Lombardy Poplar and Amur Privet North 8 ins., \$3.50 per 1000.

We can furnish truck or carload lots in many varieties of shrubs, shade trees and evergreens. Send us your want list.

First-class stock. We guarantee to please.

## NEBRASKA NURSERIES, INC.

4815 "O" St., Lincoln 8, Neb.

## SURPLUS SHRUBS

For Immediate Shipment

	Each
150 Acanthopanax, 2 to 3 ft.....	\$0.30
100 Acanthopanax, 3 to 4 ft.....	.40
1000 Ampelopsis lowi, 3-in. pots.....	.25
900 Ampelopsis lowi, 4-in. pots.....	.40
1000 Ampelopsis veltchii, 2-yr., No. 1.....	.30
150 Aronia melanocarpa, 2 to 3 ft.....	.30
50 Buddleia magnifica, No. 1.....	.30
100 Clethra alnifolia, 18 to 24 ins.....	.25
100 Cornus alba sibirica, 2 to 3 ft.....	.25
150 Cornus atonifera, 2 to 3 ft.....	.25
60 Cornus atonifera, 3 to 4 ft.....	.35
200 Cornus flammula, 3 to 4 ft.....	.40
300 Cotoneaster horizontalis 8 to 12-in. spread, 4-in. pots.....	.55
130 Cydonia japonica, 18 to 24 ins.....	.25
200 Forsythia fortunei, 3 to 4 ft.....	.35
100 Forsythia suspensa, 3 to 4 ft.....	.35
50 Forsythia suspensa, 4 to 5 ft.....	.40
50 Hydrangea arborescens, 3 to 4 ft.....	.50
700 Ligustrum, Regel, 12 to 18 ins.....	.35
800 Ligustrum, Regel, 18 to 24 ins.....	.30
400 Ligustrum, Regel, 2 to 2 1/2 ft.....	.35
100 Lonicera morrowi, 2 to 3 ft.....	.25
100 Lonicera morrowi, 3 to 4 ft.....	.35
500 Polygonum aviculare, No. 1.....	.30
200 Rosa rugosa, 18 to 24 ins.....	.30
400 Rosa rugosa, 2 to 3 ft.....	.45
100 Spiraea trichocarpa, 2 to 3 ft.....	.30
150 Symphoricarpos vulgaris 2 to 3 ft.....	.25

## ADAMS NURSERY, INC.

Westfield, Mass.

## CHINESE ELM, prices per 100; 6 to 8 ft., \$20.00; 8 to 10 ft., \$30.00; 10 to 12 ft., \$40.00; 12 to 14 ft., \$60.00.

Also Ulmus parvifolia, 8 to 10 ft., \$75.00 per 100. Bulk lots only.

## KANSAS EVERGREEN NURSERIES

Manhattan, Kan.

## SURPLUS SHADE TREES

10,000 of the following varieties, from 1 1/2 to 3-in. cal.: European White Birch, Betula nigra, Red Birch, Sycamore, Silver Maple, American Elm, Chinese Elm, Redbud, Russian Olive and Wild Goose Plum.

## SCHNELL'S NURSERIES

Collinsville, Ill.

## FLOWERING CRABS, in following varieties and sizes: eleyi, hoppi, floribunda, parkmani, sargentii, thelfera, 3 to 4 ft., \$45.00 per 100; 4 to 5 ft., \$60.00 per 100; 7 to 8 ft., in eleyi and hoppi at \$17.50 per 10.

Waynesboro Nurseries, Waynesboro, Va.

## ALTHAEA, assorted colors, 3 to 4 ft., heavy, well branched plants, \$25.00 per 100; 4 to 5 ft., \$40.00 per 100; 5 to 6 ft., \$65.00 per 100.

Waynesboro Nurseries, Waynesboro, Va.

## AMERICAN ELM, finished for fine retail trade, 2-in. cal. and up. Also S. L. Maple, Spiraea Vanhoutte and other items.

Write for prices.

## PELISHEK NURSERY, Clintonville, Wis.

## REDLEAF BARBERRY

For landscaping purposes. Heavy, dark red, twice transplanted; 18 to 24 ins., \$30.00 per 100. Packing and boxing free.

## ROLLERS WHOLESALE NURSERY

Rogers, Ark.

25,000 QUERCUS BICOLOR (Swamp White Oak), 6 to 12 ins. Ready in units of 100. \$20.00 per 1000; \$2.50 per 100.

## VERHALEN NURSERY CO.

Scottville, Texas

## JUNE BUD PEACH in leading commercial varieties, 12 to 18 ins., \$15.00 per 100; 18 to 24 ins., \$20.00 per 100.

Waynesboro Nurseries, Waynesboro, Va.

## HARDWOOD CUTTINGS

Abella Grandiflora, 7 ins., \$5.00 per 1000.

## TRAUERNICHT NURSERY CO.

400 N. Sylvania Ave., Fort Worth 3, Texas

Send for new Spring list of ORNAMENTAL TREES, SHRUBS and EVERGREENS, both liners and whip-grade stock.

## THOMAS B. MEEHAN CO.

Dresher, Pa.

## AMERICAN AND CHINESE ELM

2 to 4-in. Nice stock.

Write us your requirements.

## MERTEL NURSERY

Peru, Ill.

SUGAR MAPLES, Acer saccharum. Transplanted, 1 1/2 to 2-in. cal., \$3.00 each. Not transplanted, 1 to 2-in. cal., \$1.50 ea. F.O.B.

J. MILLER POTTER NURSERY, East Springfield, N. Y.

## ORIENTAL SNOWBALL, 2 to 3 ft., \$35.00 per 100; 3 to 4 ft., \$45.00 per 100.

Waynesboro Nurseries, Waynesboro, Va.

## SUPPLIES

## WOOD PLANT BANDS.

Used by the largest growers of Carnations, Snaps, Stocks, perennial plants and all plants to be transplanted in the greenhouse or outdoors. Get your supply now, also, for Vegetable plants for resale.

Weight Per 1000 1000

No. M-310 1 1/2 x 1 1/2 x 2 1/2 ..... 12 lbs. \$2.95

No. M-320 2 x 2 x 2 1/2 ..... 16 lbs. 3.30

No. M-340 2 1/2 x 2 1/2 x 3 ..... 20 lbs. 3.75

No. M-350 3 x 3 x 3 ..... 21 lbs. 4.10

No. M-360 3 x 3 x 4 ..... 32 lbs. 4.75

No. M-391 4 x 4 x 4 ..... 40 lbs. 5.60

Packed 1000 to the carton.

We do not break the carton.

## LIGHT WOOD PLATE.

Suitable only for holding and shipping our Wood Plant Bands. Bands are not included at prices below.

Per 1000 flats

M-370, holds 12 1 1/2-in. bands ..... \$2.75

M-390, holds 12 2-in. bands ..... 3.30

M-392, holds 12 2 1/2-in. bands ..... 3.75

M-392, holds 6 3-in. bands ..... 3.35

M-394, holds 6 4-in. bands ..... 3.95

Packed 100 to the carton. We do not break cartons.

## AMERICAN BULB CO.

1335 W. Randolph St., Chicago 7, Ill.

31-37 W. 27th St., New York 1, N. Y.

## RUBBER BUDDING STRIPS

Due to delay and difficulty in obtaining supply, we have placed our order for season's supply of Budding Strips, including some extra being offered at \$1.25 per lb. up to 50 lbs.; 50 to 100 lbs., 90c per lb.; 100 to 500 lbs., 80c per lb. for spring delivery. How many shall we reserve for you?

## WAYNESBORO NURSERIES

Waynesboro, Va.

## WAXES

Book your orders now for: Nursery-Dip-Wax for roses, shrubs.

Trowbridge Grafting Wax—tops in grafting material.

Treekote for your pruning compound.

Write for prices.

## WALTER E. CLARK &amp; SON

Milford, Conn.

## BUDDING STRIPS

Made of synthetic rubber; 4, 5 and 6-in. lengths. Packed 5 lbs. in bags, 10-lb. lots, \$1.25 per lb., 50-lb. lots, 90c; 100-lb. lots, 80c; 500-lb. lots, 70c per lb. Prices subject to change. Samples gladly furnished. Please favor us with your order or inquiry.

THE M. CONLEY CO., Canton 1, Ohio

## CEDAR STAKES for a long, durable nursery service before decay. Prices per 100: 6 to 7 ft., \$10.00; 5 to 6 ft., \$9.00; 4 to 5 ft., \$7.00; 3 to 4 ft., \$6.00; 2 to 3 ft., \$5.00. A few hundred left. Will cut stakes again next May.

Prices F.O.B. J. MILLER POTTER NURSERY, East Springfield, N. Y.

## TWINE WANTED

For sewing B&B Evergreens. Send sample.

## MERRY HILL NURSERY

49620 Ann Arbor Rd., Plymouth, Mich.

## COTTONETTE Squares are best for balling. Saves time and twine. All sizes in stock.

Write NEW AMSTERDAM IMPORT, 122 Chambers St., New York 7, N. Y.

## ZIP-STAY LABELS

Will exchange for lining-out stock.

MARKHAM'S OHIO NURSERY, Elyria, O.

## SUPPLIES—Continued

GIBRALTAR Frost Covers pay for themselves. Economical, long-lasting, ideal for windbreaks. 6 ft. wide; \$6 ft., \$15.75; 100 ft., \$26.00; 150 ft., \$39.00. NEW AMSTERDAM IMPORT, 133 Chambers St., New York 7, N.Y.

## MISCELLANEOUS

CHERRY, 1-yr., Montmorency (large) approximately Each Per 100  
1000 9/16-in. .... \$0.85 \$80.00  
900 5/16-in. .... .65 60.00  
In Sweet Cherries, we have approximately 250 of each else, 9/16 and 7/16-in., same prices as above; in Yellow Spanish, Black Tartarian, Napoleon and Windsor.

## RASPBERRIES

Per 100 Per 1000  
Latham (Red) ..... \$4.50 \$40.00  
Cumberland (Black) ..... 4.00 35.00  
Osark (Black) ..... 3.00 25.00

## STRAWBERRIES

\$1.25 per 100, \$10.00 per 1000.  
Maytime Aroma Premier  
Blakemore Klondike Dunlap

## GOOSEBERRIES

Osark, 2-yr., 20c each, \$12.00 per 100.

## RHUBARB

Giant Victoria, 1½ to 2 ins., \$8.00 per 100.

## SAGE

Holt's Mammoth, 12c each, \$10.00 per 100.

## PRIVET HEDGE

Amur River, South (the evergreen kind) well branched, 2 to 3 ft., \$7.00 per 100; 3 to 4 ft., \$9.00 per 100; 4 to 5 ft., \$11.00 per 100.

BENTON COUNTY NURSERY CO., INC. Rogers, Ark.

Blakemore Strawberry Plants, \$7.00 per 1000; Marshall Strawberry, \$1.25 per 100; Boysenberry and Youngberry, \$4.00 per 100; He de France, Butterfly Bush, 2 to 3 ft., 20c; Forsythia, Upright, 3 to 4 ft., 20c; Fredonia, Lutea, Cynthiana, 1-yr., among Grapevines, 10c; Niagara, Portland, Sheridan, 3 or 4-yr. Grapevines, salable, not too heavy, 20c; Grafted Thomas Black Walnut, 2 to 3 ft., 90c; 3 to 4 ft., \$1.25; 4 to 5 ft., \$1.50; larger ones, \$2.50, about 7 ft. Redbud, Red Maple, Tulip Poplar, 4 to 5 ft., 35c; Hops and Scheidecker Flowering Crabs, 2-yr., 3 to 4 ft., branched and partly branched, 35c. Orders under \$5.00 not accepted. Packed free. Harwell Nursery, Van Buren, Ark.

## WANTED

WANTED: Transplanted understocks as follows:

Acer palmatum  
Juniperus virginiana  
Cornus florida  
Magnolia kobus  
Magnolia acuminata  
Magnolia glauca  
Picea excelsa

Please quote prices in lots of 1000 to 5000.

HESS' NURSERIES,

P. O. Box 52, Mountain View, N. J.

WANTED: SEEDLINGS AND LINING-OUT EVERGREENS.

Chinenensis pitzieriana, Communis depressa plumosa, Communis hibernica, Thuja occidentalis, Thuja occidentalis globosa. Quote prices per 100.

SYLVANIA NURSERY & PEAT CO.

New Galilee, Pa.

## STOCK WANTED

Quote on following lining-out stock for immediate shipment:

Ligustrum, Rogel and Amur River  
Cydonia japonica maulei  
Lycium chinense  
FLORADALE

9608 Clifton Blvd., Cleveland, O.

## WANTED

POWER AND HAND-OPERATED

LAWN MOWERS.

Either in new or in first-class condition.

For particulars, write to: H. O. Beebe, Director, C and M Dept., COLONIAL WILLIAMS-

BURG, INC., Williamsburg, Va.

## WANTED

Small liners, grafts, or what have you:

Picea polita, excelsa argenteopicata, omorika and Golden Colorado Spruce. Also dwarf evergreens.

NOGA NURSERY

3606 Puhlman Ave., Cheviot, Ohio

WANTED: 5000 Grapes, Concord and Fredonia, 2 or 3-yr. 1000 Blueberries. Also other small fruit, northern-grown, and any surplus, if a bargain.

ARTHUR ZEIGER'S PLANT FARM

239 4th Ave., Pittsburgh 22, Pa.

## WANTED

200 McIntosh Apple Trees.

Quote price and size.

NORTH POLE NURSERY

Cornucopia, Wis.

## WANTED

Surplus lists of all kinds of fruit and small fruits. Also grafted nut trees.

LYNN TUTTLE NURSERY

Clarkston, Wash.

## WANTED

Quotations on 200 Jackson Vines, Smilax laurifolia. State sizes.

PAUL L. MUELLER, Landscape Architect

227 W. Cherry Circle, Memphis, Tenn.

## NEW PLANT PROTECTION PRODUCTS.

[Continued from page 33.]

I do not doubt in the postwar world, even if aerosols are not used extensively outdoors, although they may be in orchards and nurseries, they will find extensive use in greenhouses and packing buildings.

## Plant Hormones.

Growth-stimulating substances have come to the fore a great deal within the past few years. The plant hormones most generally thought of are the powders used to help promote rooting of cuttings, such as Hormodin A, StimRoot, and Rootone. The active ingredient in some of these powders is indolebutyric acid, although other plant hormones are sometimes used.

Dr. O. W. Davidson, of Rutgers University, has recently developed a method of blowing the powder on the base of cuttings before they are set into the propagating sand or other medium. It has been felt by some that quite often too much powder remains on the cutting when it is dipped into the powder and then shaken. The method of dusting with a small duster eliminates this to a large extent.

Usually manufacturers make two or three strengths in these root-promoting powders. What happens, in nontechnical language, is that the action of the rooting compound breaks down the outer tissue of the cutting. It has been found that on a great many softwood cuttings, such as geraniums, rot occurs if even slightly too much powder is left on the cutting. Plants such as geraniums should have a limited amount of the weakest preparation, whereas difficult to root hardwood plants, such as hollies, should be treated with the stronger preparations.

Most plant hormones are what are classed as acids, and the one that is valuable to orchardists is alpha-naphthaleneacetic acid, which is distributed under various trade names by several of the leading chemical companies. A small quantity of this material is dissolved in 100 gallons of water and sprayed on apple trees, about two weeks before normal picking time. The effect of this spray is to slow up the ripening of the small stem which holds the fruit to the tree; thus it remains supple or flexible, and even strong winds will not cause the fruit to drop prematurely.

As previously mentioned, some work has been done with the application of plant hormones by the aerosol method for the setting of fruits

## MYROBALAN SEED

LOVELL PEACH PIT'S

Nation's Leading Source

Write today for quotations.



## BELT'S BETTER GRASSES

For Turf, Lawn, Airfields

THE BELT SEED COMPANY, INC.  
Baltimore 2, Md.

A National Seed Service

## Send for New Seed List.

A. B. C.

"Supreme" Quality

SEEDS — PLANTS — BULBS

and  
Growers' Accessories

AMERICAN BULB CO.

1335 W. Randolph St. CHICAGO 7

31 W. 27th St. NEW YORK 1

## CHINESE ELM SEED

Due to labor shortage, we will only gather enough to fill orders on hand when picking starts the latter part of April.

BETTER ORDER NOW.

WASHINGTON NURSERIES, INC.

Toppenish, Wash.

## ASPARAGUS PLANTS

MARY WASHINGTON

Per 1000

1-yr. .... \$8.50

1-yr., in lots of 5000.. 8.00

Can supply up to 300,000 plants. We grow plants under contract, too, for the coming year.

SARACENO ASPARAGUS NURSERY

Rt. 1

Canby, Ore.

## North Dakota and Montana Seeds

Northern-grown Tree, Shrub and Wild Flower seeds. Wholesale crude botanicals.

E. C. MORAN

Stanford, Mont.

of tomatoes and other crops. One of the chemicals used for this purpose is naphthoxyacetic acid, although 2,4-dichlorophenoxyacetic acid has been used, but it is reported to be rather hard on the foliage. Tests seem to indicate that a large degree of seedlessness, in addition to greater sets of fruit, may be obtained by the use of these materials on such items as tomatoes, squashes, melons and others. No doubt, preparations of the character mentioned will be on the market this year for fruit set.

Another item which has had considerable publicity within the past few weeks is 2,4-dichlorophenoxyacetic acid used as a selective weed killer. The weed killer diluted with water is sprayed onto the weeds by means of a power or hand sprayer. In a day or two the foliage will begin to wilt and after a further period will turn brown and die.

Of course, I hardly need say that great care should be exercised in cleaning out the spray tank after using this preparation, as even a small portion of it left in the tank and then mixed with insecticide for spraying would probably do considerable damage to some cultivated plants, especially softwood varieties, such as annuals and herbaceous perennials. In order to assure a complete cleansing of the tank, one pound of trisodium phosphate dissolved in twenty-five gallons of water will be found effective. Better yet would be the use of a separate sprayer for applying the selective weed killer exclusively.

There is already on the market one preparation containing this plant hormone, and no doubt there will be others.

T. R. PEYTON, who bought the San Antonio Nursery and combined it with the Peyton Nursery at 3700 Fredericksburg road, San Antonio, Tex., on the death of M. Myers a year ago, recently acquired an adjacent tract of thirteen and one-half acres for the expansion of operations.

#### DON'T BE LATE!

Present printing conditions require that more time be given for putting current issues of the American Nurseryman through the press. So if you send material for either the advertising or the news columns of the April 1 issue, please mail in time to reach this office by March 21.



WE ARE NOW Offering  
a Limited Number of our  
**NURSERY HAND TRUCK**  
It will help to solve your  
labor problem.

Price, complete with Balloon Tires,  
**\$35.00** F.O.B. Kansas City

*Sound Business Management looks ahead. We  
suggest you order now for Spring Requirements.*

**THE GARDEN SHOP, Inc.**  
4819 Mission Rd. Kansas City, Kan.

**PUZZLED?**

As you line up future projects you will undoubtedly run into out-of-the-ordinary lawn-planting problems. Simply remember that we are continually doing research on our Four Trial Grounds, and will gladly answer unusual questions.

**WOODRUFF *Lawn* SEED**  
F. H. WOODRUFF & SONS, INC., MILFORD, CONN., TOLEDO, O., ATLANTA, GA. AND *Flawn* DALLAS, TEXAS

#### SHINGLE TOW (CEDAR SHAVINGS)

Baled western red cedar shavings  
for nurserymen.

Sample sent on request.

Wire or write for quotations.

**PORTLAND SHINGLE TOW CO.**  
9038 N. Denver Ave. Box 5635  
Portland 3, Ore.

#### WOOD LABELS

For Nurserymen

**DAYTON  
FRUIT TREE LABEL  
CO.**

Ray and Kiser Sts. DAYTON, O.

#### SANI-SOIL

The perfect mulch and soil conditioner

**BAMBOO CANES — RAFFIA — BULBS**

**McHUTCHISON & CO.**  
95 Chambers St. New York 7, N. Y.

#### THOS. W. SCOTT Martin, Tenn.

Specializing in the sale of nursery  
properties, any size, anywhere.  
Write me if you wish either to buy or  
sell a nursery.

#### LABELS FOR NURSERYMEN

**THE  
BENJAMIN CHASE  
COMPANY**  
DERRY, N. H.



# New Books and Bulletins

## SPRAY CHEMICALS AND APPLICATION EQUIPMENT.

For the nurseryman or anyone else concerned with the application of insecticides and fungicides, the new book "Spray Chemicals and Application Equipment" is an extremely useful handbook, not only on account of the complete discussion of the many chemicals used for sprays, but also for the illustrations as to their application and the equipment used for that purpose.

The authors are Dr. J. A. McClinck, professor of horticulture at Purdue University, and Wayne B. Fisher, who studied under him, graduating from Purdue in 1938, and who has since been a chemical sales representative and commercial horticulturist. Their knowledge of the subject and acquaintance with the industry enable them to present their information thoroughly and helpfully.

The book is of large page size, 8½x11 inches, and arranged in a style easy to read and understand. It contains more than 300 pages and over 500 illustrations, the latter of a practical character, many of them art drawings donated by the various manufacturers of the chemicals and equipment with which the book is concerned. The price is \$4 per copy.

Divided into two parts, the book first presents the interesting historical background of many chemicals, shows how they are manufactured, discusses methods of using spray chemicals, tells the insects and diseases controlled by specific chemicals and describes methods of improving present-day pest control practices.

The second part describes almost every type of sprayer and duster available to the public for use in applying spray chemicals. About 300 illustrations are included. The types of equipment shown range from the simplest atomizer sprayer to the largest commercial sprayer trucks.

This up-to-date handbook will be a valuable reference volume at this time when thorough control of insects and diseases is necessary for the most efficient production of quality stock.

## PENNSYLVANIA ROSE TESTS.

A report on the second year's test of hybrid tea roses in the test garden at Pennsylvania State College, State College; has been published as paper No. 1262 in the Journal Series of the Pennsylvania agricultural experiment

station. The author is E. I. Wilde, and the report is issued on fourteen sheets of mimeographed foolscap paper.

There are two extensive tables, which show the results for the second year's tests of 177 varieties of roses and the first year's tests of ten varieties. The experiments were begun in the fall of 1942, with 177 varieties; a year later, ten more varieties were added.

Notable during the season 1943-1944 was the prevalence of black spot, seventy-nine per cent of the plants having a slight or medium infection, while six per cent were nearly defoliated and fifteen per cent appeared to be free of the disease. Regarding winterkilling, 17.4 per cent of the rosebushes planted in the fall of 1943 were winterkilled and less than one per cent of the plants planted the preceding year were killed during the second winter.

The production of flowers during the second year was fifty-seven blooms per bush, a result 124 per cent higher than the production during the first year. The average production of blooms varied with the variety from 164.3 blooms for Pedrables to 14.8 for Golden Frills.

Among the roses tested during 1943-44 for the first time were Douglas MacArthur, Fred Edmunds, Golden Harvest, Lissy Hortsmann, Lowell Thomas, Mme. Chiang Kai-shek, Mme. Marie Curie, Mrs. Paul R. Bosley and Pearl Harbor.

The report of the earlier rose test is known as paper No. 1216 in the Journal Series.

ALBERT EASTON, Marietta, N. Y., visited trade members in Chicago on his way to Wisconsin on a business trip. He reported 15-foot snow banks on the road in the vicinity of Marietta.

## SITUATION WANTED

Nurseryman, age 60, married, experienced landscape architect, sales, and economic handling of labor and equipment. Advise details of offer, living conditions, etc.  
Address No. 340, care of American Nurseryman.

## HELP WANTED

Well known nursery on L. I., N. Y., wants experienced nurseryman to take complete charge of growing, propagating and planting. Great opportunity for right man. Living quarters on premises.  
Address Box 339, care American Nurseryman

## HELP WANTED

Executive with landscape and nursery experience to call on clients, suburban Boston, and handle office matters. Good, permanent position with old-established company.  
LITTLE TREE FARMS, INC.  
3 Warren Rd., Framingham, Mass.

## WANT ADS

Help and Situation Wanted and For Sale advertisements.

Display: \$2.50 per inch, each insertion.  
Lines: 20¢ line; Minimum order \$1.00.

## WANTED

EXPERIENCED NURSERYMAN

To operate a 7-acre, 1000-ft., main highway frontage retail nursery near Milwaukee, Wis.

Possibility of a financial interest, or will sell outright. State qualifications and salary expected.

Address Box No. 341, care of American Nurseryman, 343 S. Dearborn, Chicago 4.

## HELP WANTED

Nursery field superintendent by large midwest nursery. Will offer unlimited opportunity for advancement to the right man who must have had good education, training and experience in nursery production. Must be able to handle men and organize his work in an efficient manner. We are only interested in a man of fine character who will come with us to stay.

Address Box 342, care of American Nurseryman.

## FOR SALE

On account of the death of my husband, Theo. Albert, I am offering our nursery business for sale. Mr. Albert had been in the nursery business for twenty-five years in the state of Washington and is known to have grown only quality nursery stock. It consists of large varieties of evergreens and shrubs, such as Camellias, Daphne, Viburnum, Barberry, Junipers, etc. Three acres of land and stock, with newly remodeled residence, also propagating house and nursery stock on five acres of leased land adjoining.

Inquire of  
MRS. THEO. ALBERT  
R. 7, Box 107, Olympia, Wash.

## FOR SALE

Nurseries—West Coast, Central States, South, elsewhere. Landscape service—New York. Flower shops—Ohio and Okla.

WANTED: Greenhouse range—Mich. Nurseries—East Seaboard, Midwest, other. Flower shop—Florida.

Write me if you wish either to buy or sell a business.  
THOS. W. SCOTT, Martin, Tenn.

## FOR SALE

Two used Hagenfritz Openers . . . may need slight overhauling. \$50.00 each. Well worth double.  
THE COLE NURSERY CO.  
Painesville, O.

## HELP WANTED

Nursery Foreman for nursery along eastern seaboard; 500 acres under cultivation, mostly ornamentals. Man capable of handling men and supervising digging and planting.

Address Box 343, care of American Nurseryman.

## VITMUS Trade Mark

"The Sweetheart of the Soil" is used by nurserymen, greenhouse operators, landscape gardeners and other professional growers in every state and even in Alaska. Our files are filled with letters of praise, but we can print only a few excerpts.

Here is what a famous botanist writes:

*"I am writing this voluntary comment on VITMUS, which product we used last year with marvelous success."*

*"It certainly acts like magic and I do not hesitate to say that it is my opinion almost unbelievable possibilities are quite within the range of its use. A fair trial is all that is necessary to convince any fair-minded person of its practical use in the cultivation and development of plant life generally."*

*Joseph E. Harned, Author of  
"Wild Flowers of the Alleghenies"*

While a Georgia nursery, realizing our inability to fill all orders during the spring rush, wrote in as follows:

*"Please ship by return motor freight one ton VITMUS or any part of a ton you can ship. We have been very much pleased with the results we have had with VITMUS."*

Now, we could fill this magazine with hundreds of others, but that is unnecessary. Let us convince YOU this spring. Orders must be placed now to assure delivery. We were greatly oversold last spring.

Write TODAY for descriptive literature and confidential wholesale prices. USE YOUR LETTERHEAD, PLEASE.

### SOIL RESEARCH LABORATORIES, INC.

531 E. Main St.

Dept. N.

Lancaster, Ohio

A well known college, through its president, had this to say:

*"This was the first year we have used this product but the results were so desirable we shall make it habitual. We found it of marked value, not only in the vegetable garden but also for flowers and fruit trees that were planted last spring. We take pleasure in commending its use for farm, garden, flowers and fruit trees."*

A tree expert of Columbus, Ohio, starts his letter with this paragraph:

*"You may be interested to know some of the results we've had from the use of VITMUS on shade and fruit trees, hedges, all types of shrubs, evergreens and lawns. We have not used any type or brand of fertilizer or plant food other than VITMUS since first using it three or four years ago."*

### CREDITS AND COLLECTIONS.

[Continued from page 10.]

are still ignored. What next? Just one recommendation: Clamp down on that customer so hard that he knows you mean business. Give him to understand that you intend to bring the case into court unless the account is settled within a certain number of days, and once you have made that threat, back it up. Don't, by any means, tell a customer you are going to bring the case into court unless he does thus and so without your fulfilling that statement. To fail to follow through simply means that your customer considers that you are merely bluffing and have no intention of doing as you say.

There is a court for every case, from the small claims court up to the supreme court. Your attorney knows the court in which to place the particular account.

If the account is small, our method is not to sue for the amount of that account, but instead for damages or expense due to breach of contract. You can obtain a judgment for breach of contract to much better advantage than you can obtain a judgment on a plain open account.

Once the judgment is obtained, the next move is to obtain garnishee

DOES ALL  
TILLAGE  
JOBS

## INCREASE PLANT YIELD...

with

## LESS MANPOWER



**A COMPLETELY PULVERIZED LEVEL SEED BED IN ONE OPERATION .....**

## ARIENS Company

BRILLION WISCONSIN



**ARIENS TILLER** is the perfect all-purpose tilling and cultivating combine for the nurseryman. It harrows as it discs as it plows ... one operation produces a properly prepared seed bed, thoroughly aerated, with pulverized soil, shredded and evenly mixed ... no large soil chunks to retard plant growth ... can be operated wet or dry seasons ... 3 models to meet your requirements. Complete details and name of nearest distributor on request.

of the debtor's wages or salary. This can be obtained through court order. After the order is served on the debtor, if he fails to comply and remit the amount designated by the court each week, it can then be referred to his employer and it will be necessary that the employer de-

duct the amount from his wages weekly or monthly, as may be stipulated by the court.

You may say that it does not pay you to go through all this legal process for \$15. However, your customers talk and during unguarded moments will let it slip out that they bought



## You Can Grow More Vegetables With Less Work When You Use A Planet Jr. Wheel Hoe!

Planet Jr. Wheel Hoes are designed and built by men who *know* the grower's problems! That's why these *specialized* tools—single and double Wheel Hoes, Seeders, Fertilizers—make your job easier . . . help you grow bigger crops of better vegetables with less work. *There's a Planet Jr. Wheel Hoe tailored to fit your particular needs!*

The Planet Jr. line includes many other *specialized* tools—Garden Tractors and attachments . . . horse or tractor drawn Seeders, Fertilizers, and Cultivators.

Right now we are working under Government limitations so that the supply of Planet Jr. Wheel Hoes is limited—but there'll be more when present restrictions are removed. We suggest that you write for the Planet Jr. Implement Catalog *now*.

S. L. ALLEN & CO., Inc.

3413 N. 5th Street

Philadelphia 40, Pa.

Makers of Planet Jr. Garden Tractors  
Catalog on Request

75 years making your work easier

**Planet Jr.**  
FARM AND GARDEN TOOLS

\$15 worth of materials from you and received a lot of threatening letters, but nothing was done and finally the matter was dropped. It encourages others to do likewise.

By the same token, if you have sued on that account and enforced collection and the cost of such enforcement has been added to the amount of the account, this being customary, the debtor has paid, no doubt, \$25, \$30 or \$35, instead of the original \$15, and when someone gets talking about a thing of this nature, he is going to say, "You had better pay the \$15 or it will cost you \$35, as it did me." Customer No. 2, or perhaps we should call him debtor No. 2, thinks twice and pays.

In summing up, my suggestion is, use leniency where justifiable; clamp down hard where necessary, and go the limit with the unscrupulous.

And I again repeat, sales, credits and collections go hand in hand down the nurseryman's pathway leading to success or failure.

### SURVEY PHLOEM NECROSIS.

As has been previously reported in the American Nurseryman, phloem necrosis has caused an extensive dying of elms in scattered localities of Missouri. The disease has been particularly damaging in the cities of St. Louis and Kansas City, where the American elm, with its varieties, is extensively planted for shade tree purposes. The individuals concerned with the maintenance of plantings along streets and boulevards and in the parks and real estate developments in the municipalities are greatly disturbed about the future prospects of their extensive elm plantings. A major problem facing these cities is the development of a plan of replanting that will provide desirable shade trees in areas where the elms have been destroyed by phloem necrosis,

## HYPONEX PLANT FOOD

Grows Superior Plants in Poorest Soil  
Sand, Cinders or Water

Used by florists, farmers and gardeners for:

**FEEDING**—flowers, vegetables, lawn and trees.

**TOP DRESSING**—soluble—plants absorb it quickly.

**SEED GERMINATION**—helps to prevent damping-off.

**CUTTINGS**—keeps succulent until transplanted.

**TRANSPLANTING**—helps reduce shock and wilting.

This clean, odorless powder produces stronger root system with more feeding branches; greater substance in stems, more and larger flowers or fruit. Does not burn roots or foliage when used in solution form as directed.

Sell HYPONEX to your customers for their gardens and house plants. Nationally advertised.

1-oz. pkg. retails 10¢—packed 72 to case.

3-oz. can retails 25¢—packed 36 to case.

1-lb. can retails \$1.00—packed 12 to case.

Also in 10, 25, 50 and 100-lb. drums.

Write jobber or us for dealer and grower prices.

Buy from your jobber or send 10¢ for 1-oz. sample (makes 6 gallons) or \$1.00 for 1 lb. (makes 100 gallons).

Dollar credited on first order for 1 case for resale or drum for your own use.

**HYDROPONIC CHEMICAL CO., INC.**  
315 West 39th Street  
New York 18, N. Y.

## 3 FAMOUS PRODUCTS

**C. P. O.**—The safe spreader for better control of Lace Bug, Red Spider, Juniper Scale, Lilac Scale, Pine Leaf Scale, Spruce Gall Aphid.

**CRYSTAL BORER REPELLENT**

For most species of borers on deciduous trees. Apply as protective measure. Used by leading tree companies.

**CRYSTAL NO-DRI**

A scientific wax emulsion. Can be applied with spray equipment. Retards and reduces loss of moisture. Permits transplanting out of season.

Write for free booklets

**Crystal Soap & Chemical Co., Inc.**

Department AN

6300 State Road, PHILADELPHIA, PA.

## ATTENTION NURSERYMEN!



**IMP.  
SOAP  
SPRAY**

Use 1 part with 25 to 40 parts of water

Ask your nearest seedman, or  
write for literature.

**THE AMERICAN COLOR AND CHEMICAL CO.**  
176 Purchase St. Boston, Mass.

## Own a SOIL TEST LABORATORY Of Your Own



**\$22.50**

express paid

### SUDBURY PORTABLE SOIL TEST LABORATORY

The most valuable piece of equipment you can own, giving you the soil information that you need for efficient production. Widely used by estates, professional growers and government field stations. Will last almost a lifetime with refills. Comes in instrument type, solid mahogany case. No chemistry knowledge required. Complete with instructions and helpful chart. **SEND NO MONEY.** Order C.O.D. \$22.50, plus express charges (or send \$22.50 and we pay express). Money back guarantee.

Dealers Write for Special Offer.

**SUDBURY SOIL TEST LABORATORY**  
953 Dutton Road So. Sudbury, Mass.



Extends Transplanting  
Season—Reduces Losses



The Dow Chemical Company  
Midland, Michigan



For Treating  
Cuttings  
and Seeds  
Bulbs and Tubers

Scientific Growth Stimulant

Write for Free Booklet

**SCHUYLKILL CHEMICAL CO.** 2348 Sedgley Ave.  
Philadelphia 32, Pa.



writes T. W. Bretz in a recent issue of the Plant Disease Reporter.

Because the disease is new to Missouri and apparently has been present in the known locations for relatively few years, it is difficult to predict what its future course may be. However, the disease has been known for some years in other states, notably Ohio and Kentucky, and it is thought to have been present in certain localities for many years, perhaps fifty years or more. It was therefore considered desirable to make observations in areas where the disease has been prevalent for some time in order to obtain an appreciation of its behavior over a period of years. With this in mind T. W. Bretz, accompanied by Dr. C. M. Tucker, of the botany department, University of Missouri, and J. A. Denning, state entomologist, traveled to Lexington, Ky., where phloem necrosis is thought to have been present for many years; Dayton, O., where it has been known since 1927 and where it has been especially destructive this past season, and Columbus, O., where the disease was also seriously damaging in 1944. Dr. W. D. Valleau, of the University of Kentucky, gave generously of his time and his information regarding the behavior of the disease in that area. At Columbus, Roger U. Swingle, of the forest pathology field station of the United States Department of Agriculture, and members of his staff showed the progress of their research on the disease and pointed out, as well, some of the areas in the city where the disease had been most destructive.

Evidence of phloem necrosis of elms was observed at scattered points across southern Illinois and Indiana while en route to Kentucky and upon the return trip from Ohio. In the vicinity of Lexington, Ky., the disease was observed affecting many planted trees ranging in age from fifteen to twenty-five years. In this area, however, a number of native trees which antedate the earliest supposed occurrence of phloem necrosis and which, presumably, have been intermittently exposed to it, as evidenced by the active development of the disease in younger trees in recent years still survive. This strongly suggests that these trees are resistant to, possibly immune from, phloem necrosis. Between Cincinnati and Dayton, O., the scarcity of elms was quite noticeable, suggesting the possibility that few trees had survived earlier epiphytotic. In the latter city, the destruction of elms appeared to be almost complete. The number of dead and dying trees ex-

**Save Time      Save Twine      Save Labor**

## with FELINS ELECTRIC BUNCH TYER

For Bunch Vegetables, Cut Flowers, Nursery Stock



# FELINS

Milwaukee 6

Wisconsin

## CARPENTER TWINES HAVE GONE TO WAR

WHEN AGAIN AVAILABLE  
WE WILL CONTINUE TO BE HEADQUARTERS FOR

**CARPENTER'S  
NURSERY TWINES**  
**GEO. B. CARPENTER & Co.**

430 N. WELLS ST., CHICAGO 54, ILL.



MARKHAM'S OHIO NURSERY  
ELYRIA, OHIO

## Zip-On and Stay Put

Made of waterproofed tagboard... easy to apply and will improve the appearance of your spring shipments.

**MARKHAM'S OHIO NURSERY**  
Elyria, Ohio

## Learn LANDSCAPE GARDENING

A thorough, interesting, constructive home training for those who wish to become LANDSCAPERS, DESIGNERS, GARDENERS, etc., for profit or pleasure. Write today for FREE INFORMATION, including cost, to

**NATIONAL LANDSCAPE INSTITUTE**  
Dept. H-3, 756 S. Broadway      Los Angeles 14, Cal.

**RUBBER SPRAY HOSE**  
*America's Finest*

Best Buy On the Market  
Write for Free Sample

ALSO OTHER HARD-TO-GET RUBBER ITEMS:

RUBBER BANDS	GLOVES
V-BELTS	APRONS
WATER HOSE	RAIN CLOTHING
FINGER COTS	FOOTWEAR
TUBING	SUCTION HOSE
FRUIT GRADER BELTS	

GET OUR PRICE SHEET TODAY  
**BROADWAY RUBBER MFG. CO.**  
529 East Broadway      Louisville 2, Ky.

## A. M. LEONARD & SON

Piqua, Ohio

**Tools — Grafting Supplies**

Write for Bulletin.

## BOOKS

### for Nurserymen

**Book A.** Illustrates in full color 235 standard nursery items, brief description, substantially bound. Price in small lots, 75c each.

#### **Descriptive Nursery Catalog**

Nicely illustrated, 48 pages and cover. 18c each in small lots.

#### **Correct Planting Methods**

A pocket-size 48-page booklet. Very complete but concise information, well illustrated. Helpful in preventing claims for dead stock that cost nurserymen money. Sample, 10c. Write for discounts on quantities.

Will send sample copy of each of the above on receipt of \$1.00. Cash with order.

#### **Made to Order**

Catalogs, Folders, etc., with illustrations in full color or one color. Thousands of engravings available. Send your specifications or samples for estimate and suggestions.

**A. B. MORSE COMPANY**  
ST. JOSEPH, MICHIGAN

## GENUINE MOSS PEAT

Hydraulic pressed bales and smaller resale packages. Sphagnum Moss, Cultivated Peat Humus.

Shipped from Northern plant at Floodwood, Minn., and Hanlontown, Iowa. Annual capacity 1,000 carloads.

Now booking for present and future deliveries.

Write or wire for quotations.

**Colby Pioneer Peat Co., Inc.**  
Hanlontown, Iowa

## IT COSTS NO MORE (and in most instances less) FOR OUR PACKING OF Nursery Burlap Squares and Rolls

Write for prices and samples.

**L. ATKIN'S SONS**  
P. O. Box 167 Rochester, N. Y.

Write for Bulletins and Lists of supplies  
for nurserymen and florists

**Schupp FLORIST SUPPLY CO.**  
Dept. A Wilmotte, Ill.

ceeded the number of healthy specimens observed, and it has been estimated that 20,000 trees died in 1944 from phloem necrosis.

#### **NEW SPRAY TO KILL WEEDS.**

"They grew so fast they killed themselves" will be the epitaph of next summer's weeds, treated with a new selective weed killer announced by the Dow Chemical Co., Midland, Mich., for use on lawns and in shrubbery beds. This weed killer is a spray that need be applied to lawns but twice a year. It is a hormone, dichlorophenoxyacetic acid, that settles on the broad-leaved weeds, causing them to grow rapidly, too rapidly for adaptation and they literally kill themselves through rapid growth.

The spray will kill the entire weed plant. In most cases there will be no underground roots left alive to regenerate. The grass, because of its limited leaf surface, will not be affected by the spray.

The selective weed killer, developed by the New York state agricultural experimental station and the United States Department of Agriculture, and manufactured by the Dow Chemical Co., will be available next summer. There is no trick to the method of spraying the lawns; it will be economical and effective against most types of weeds, states the company's announcement.

#### **TEXAS RATES THE SAME.**

George F. Verhalen, chairman of the freight rate committee of the Texas Association of Nurserymen, reports that the rate division of the railroad commission of Texas has announced that the Texas motor carriers' application to increase the rates on nursery stock exceeding six feet in height has been withdrawn by them and the case is dismissed without prejudice. This leaves the Texas motor carriers' rates for this stock without change.

FRANK B. BONNELL has purchased the market building property on the northwest corner of Pine street and Seventh avenue, Seattle, Wash. The purchase price was \$75,000.

THE main building, boiler room and three greenhouses of Kathryn A. Scoskie, Paramus, N. J., were recently destroyed by a fire of undetermined origin. Firemen were able to save some of the plants, but most of those in the greenhouses were lost.

## EVERYWHERE

our

## SUBSTITUTE.

for

## BURLAP SQUARES Are Giving Complete SATISFACTION

### *Why Not Try Them?*

Write for Samples  
and Prices

**AMERICAN-NATIONAL BAG & BURLAP CO.**  
INCORPORATED

343 KENT AVE. BROOKLYN 11, N. Y.  
EVERGREEN 8-1207-9-9

## SAVE WITH CUPRINOL

Preserves wood from rot.

Dyed green — Serves as priming coat — Increases life of plant — Covers 400 sq. ft. to gallon — Easy to apply — Will not injure plants.

Gallon .....	\$2.90
5 gal. ....	2.80
50 gal. ....	2.70

**SOMERSET ROSE NURSERY, INC.**  
P.O. Box 608 New Brunswick, N. J.

## RAFFIA

We can now supply

#### **MADAGASCAR**

as well as **CONGO RAFFIA**  
in various grades.

Send for latest prices.

**THOMAS B. MEEHAN CO.**  
Dresher, Pa.

"COTTONETTE" Nursery Squares  
"GIBRALTAR" Frost Covers  
LIVE SPHAGNUM MOSS  
RAFFIA for budding, etc.  
"SAMSON" MATS

Write for prices; state requirements.  
**NEW AMSTERDAM IMPORT CO.**  
122 Chambers St. New York 7, N. Y.



A plant of American Bittersweet. Potted April 10, picture taken May 20.

## CLOVERSET POTS

Help You Grow Better Stock  
Help You Make More Profit  
Bring Your Business Up to Date

FOR ROSES, PERENNIALS, CHRYSANTHEMUMS, SHRUBS, VINES and FRUIT TREES

CLOVERSET POTS ARE MADE OF ASPHALT IMPREGNATED FIBER STOCK

### CLOVERSET POTS OFFER THE FOLLOWING ADVANTAGES

1. No loss from breakage. 2. Weight only 1/16th the weight of same capacity clay pots. 3. Low price, may be given away with the plant. 4. Non-porous, only 1/2 as much water is required to sufficiently supply the plant. 5. Easy to remove from the plant by the purchaser. 6. Convenient to use by the grower. 7. Practical in shape with twice the soil capacity of same size clay pot. 8. Wide base prevents falling over in display gardens.

### CLOVERSET POTS ARE NO EXPERIMENT

We have been using them successfully the past fifteen years. In 1943 we sold over one million pots to nurserymen and florists all over the United States and we have received hundreds of letters telling us of their success with them. We offer you these Cloverset Pots as a profitable operating medium through which to market your Roses, Perennials, Vines and all Small Nursery Stock.

### CLOVERSET POTS SAVE LABOR

Roses, vines, shrubs and perennials may be potted early in the spring before the rush begins. Later a small sales force can handle much more stock.

Cloverset potted roses and other plants are especially suitable for cash-and-carry trade, so necessary in these times.

Send for FREE catalog giving technical instructions for using Cloverset Pots and showing how we display our potted plants in our sales yards and gardens.

### CLOVERSET POTS WILL HELP YOU GROW BETTER PLANTS

A plant grown in our Cloverset Pot means a better plant, which means a better satisfied customer, which means a larger business, which means more profit. Try our Cloverset Pots. We promise you they will not disappoint you.

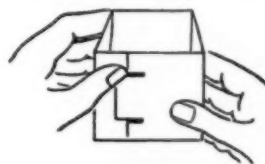
**ERNEST HAYSLER & SON — CLOVERSET FLOWER FARM**  
105th STREET and BROADWAY — KANSAS CITY 5, MO.

## A.F.S. "Easi-Off" WOOD PLANT BANDS



Removed  
without  
cutting

### IDEAL FOR NURSERYMEN



Easily  
assembled

Available in most popular sizes for small as well as larger stock of evergreens, roses, perennials and like material. Saves time and labor. Reduces losses at transplanting time.

Send your order now.

#### SIZES AND PRICES

CAT.	Size in inches	Weight per 1000	Per 1000
No. M-310	1 3/4 x 1 3/4 x 2 1/2	12 lbs.	\$2.95
No. M-320	2 x 2 x 2 1/2	15 lbs.	3.30
No. M-340	2 1/2 x 2 1/2 x 3	20 lbs.	3.75
No. M-350	3 x 3 x 3	21 lbs.	4.10
No. M-360	3 x 3 x 4	32 lbs.	4.75
No. M-391	4 x 4 x 4	40 lbs.	5.60

Packed 1000 to the carton. We do not break the cartons.

#### FLATS — LIGHT WOOD FOR ALL SIZE BANDS

For handling and shipping our 1 3/4-inch and 2-inch sizes of Plant Bands. Per 100

M-370: holds twelve 1 3/4-inch Bands.....	\$2.75
M-390: holds twelve 2-inch Bands.....	3.30
M-392: holds twelve 2 1/2-inch Bands.....	3.75
M-393: holds six 3-inch Bands.....	3.25
M-394: holds six 4-inch Bands.....	3.95

Packed 100 to the carton. We do not break the cartons.

**AMERICAN FLORIST SUPPLY CO. CHICAGO 7** 1335 W. Randolph St.



# Flowering Crabs for Lining Out

(Now Available for Immediate Delivery Out of Storage)

"The flowering crab apples are fast becoming the most popular group of ornamental trees in North America."—DR. DONALD WYMAN, Crab Apples for America.

**ADSTRINGENS**—Very early bloomer. Fruit various shades of red and yellow. Flowers are deep rose-colored in bud, opening to a lighter shade or rose-pink, 1½ inches in diameter.

**BREVIPIES**—A large white-flowering variety, flowers 1½ inches in diameter. Fruit small, bright red. Tree grows 20 feet.

**DOLGO**—Pure white, large flowers. Fruit bright red, 1 inch or more; edible.

**FLORIBUNDA PURPUREA**—Very early, bearing large red flowers with purplish-green foliage. Fruit very large, purplish-red.

**RINGO**—A tall, upright grower with pink flowers. Foliage large, dark, shiny green. Strong grower. Fruit orange; 1 inch in diameter.

**PURPUREA ELEI**—Single purplish-red flowers 1½ inches in diameter. Fruit purplish-red, up to 1 inch.

**PURPUREA ALDENHAMENSIS**—Single and semidouble, 2-inch, purplish-red flowers. Fruit also purplish-red, about 1 inch in diameter.

**SARGENTI**—A low shrubby tree, 6 to 8 feet in height, with spreading branches. Flowers pinkish-white, opening to pure white. Fruit berrylike, dark red.

**SCHEIDECKERI**—Double flowers, 10 petals, about 1 inch, pink. Yellow and orange fruit. A small tree, early-flowering.

**THEIFERA**—Buds rose-red, opening to almost white. Foliage light green, tinged purple. Fruit small, a bright red.

**ZUMI CALOCARPA**—Flowers very large, showing pink in bud opening. Fruits small, bright red to orange, one of the best for fruit.

## Prices on Flowering Crabs

		Price Each
Adstringens	12 to 18 ins.	\$0.30
Adstringens	18 to 24 ins.	.35
Adstringens	2 to 3 ft.	.40
Adstringens	3 to 4 ft.	.45
Brevipes	18 to 24 ins.	.35
Brevipes	2 to 3 ft.	.40
Dolgo	12 to 18 ins.	.30
Dolgo	18 to 24 ins.	.35
Dolgo	2 to 3 ft.	.40
Floribunda Purpurea	18 to 24 ins.	.35
Prunifolia Ringo	12 to 18 ins.	.30
Prunifolia Ringo	18 to 24 ins.	.35
Prunifolia Ringo	2 to 3 ft.	.40

		Price Each
Purpurea Aldenhamensis	12 to 18 ins.	\$0.30
Purpurea Aldenhamensis	18 to 24 ins.	.35
Purpurea Elei	12 to 18 ins.	.30
Purpurea Elei	18 to 24 ins.	.35
Purpurea Elei	3 to 4 ft.	.45
Sargenti	12 to 18 ins.	.30
Sargenti	18 to 24 ins.	.40
Scheideckeri	12 to 18 ins.	.30
Scheideckeri	18 to 24 ins.	.35
Theifera	18 to 24 ins.	.35
Theifera	2 to 3 ft.	.40
Theifera	3 to 4 ft.	.45
Zumi Calocarpa	18 to 24 ins.	.35
Zumi Calocarpa	2 to 3 ft.	.40
Zumi Calocarpa	3 to 4 ft.	.45

Sold Only in Bundles of 10 of a Kind.

We still have a limited supply of lining-out stock as well as balled grades for landscape use.

We will be glad to quote on your needs.

# D. HILL NURSERY COMPANY

*Evergreen Specialists*

:-:

*Largest Growers In America*

DUNDEE, ILLINOIS